

STRATEGIC PLAN

Lives Beyond Limitations
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Lives Beyond Limitations



October 1, 2001

BOB HOLDEN
GOVERNOR

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October 1, 2001

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The Honorable Bob Holden
Governor, State of Missouri
Executive Office, State Capitol
Jefferson City, MO 65101

Dear Governor Holden:

The Department of Mental Health wishes to submit this document that reflects our most recent strategic planning efforts. Meaningful and effective planning is an essential step in advancing critical support and services to the thousands of Missourians with mental illness, substance abuse/addiction, and developmental disabilities.

The plan presents the balancing of our two roles in responding to the mental health needs of Missouri citizens; that of a public mental health authority and that of a provider or broker of services and supports for targeted populations. We have identified four important issues for department focus. Two issues reflect our broad public mental health charge by identifying needed prevention efforts in the areas of substance abuse among youth and suicide. The other two issues address operational improvements specific to serving persons with severe mental illness, addiction problems, and/or developmental disabilities. You will note that concern for children and youth is a dominant and consistent theme in our planning.

The projected fiscal realities of the next few years have heavily influenced our planning efforts. Many of the strategies reflect efforts to do more with less. Many underscore the need for interdepartmental cooperation and joint ventures to stretch limited resources further as well as accomplish other meaningful objectives.

The Mental Health Commission, the Department, and the entire mental health community remain committed to improving the lives of Missourians affected by mental illness, substance abuse and developmental disabilities.

Sincerely,

A handwritten signature in cursive script that reads "Patricia S. Graber".

Patricia S. Graber
Interim Director

PSG:rsc

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Vision, Mission and Values

Our Vision - Lives Beyond Limitations

Missourians shall be free to live their lives and pursue their dreams beyond the limitations of mental illness, developmental disabilities, and alcohol and other drug abuse.

Our Mission

Working side by side with individuals, families, agencies, and diverse communities, the Department of Mental Health establishes philosophy, policies, standards, and quality outcomes for prevention, education, habilitation, rehabilitation, and treatment for Missourians challenged by mental illness, substance abuse/addiction, and developmental disabilities.

Our Values

- **Full Community Membership**--All people are accepted and included in the educational, employment, housing, and social opportunities and choices of their communities.
- **Access**--All people can easily access coordinated and affordable services of their choice in their own communities.
- **Individualized Services and Supports**--All people design their own services and supports to enhance their lives and achieve their personal visions.
- **Cultural Diversity**--All people are valued for and receive services that reflect and respect their race, culture, and ethnicity.
- **Dignity, Self-worth, and Individual Rights**--All people are treated with respect and dignity and their rights are ensured by persons providing them with services and supports.
- **Prevention and Early Intervention**--All people live their lives free of, or are less affected by, mental or physical disabilities as a result of our emphasis on prevention and early intervention.
- **Excellence**--All people determine the excellence of their services and supports based on the outcomes they experience.
- **Valued Workers**--All people who provide services and supports are our organizations' most important resources.
- **Competence**--All people receive services delivered by staff who are competent in dealing with culture, race, age, lifestyles, gender, sexual orientation, religious practice, and ethnicity.

DEPARTMENT OF MENTAL HEALTH STRATEGIC PLAN – October 2001

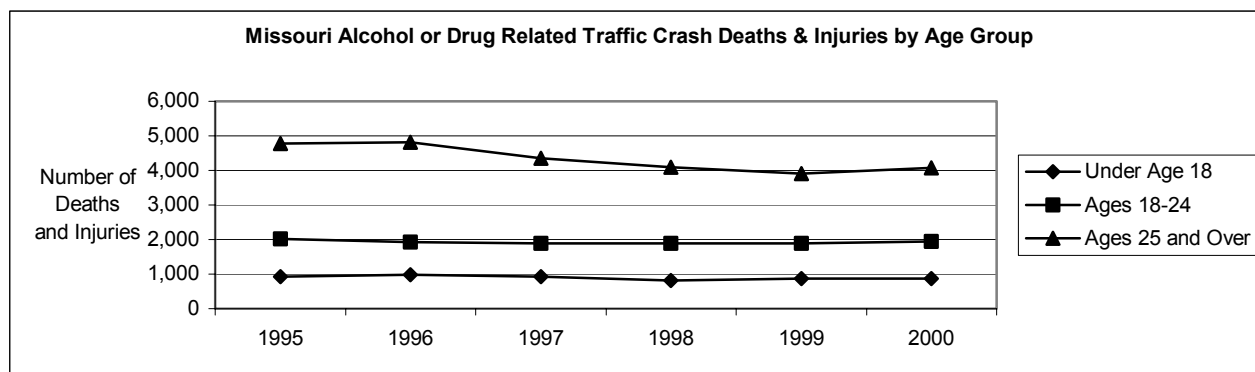
QUICK REFERENCE

OUTCOMES	OBJECTIVES	STRATEGY SUMMARY
1 Reduced Deaths & Injuries Associated with Substance Abuse Among Young Missourians	1A Decrease Binge Drinking Among College Students	- Implement University of MO Campus Prevention Services Established through Interagency Contract - Implement with DESE School-Based Prevention & Intervention Initiative – Pilot 6 Sites in MO - Pending Receipt of State Incentive Grant Develop & Implement Additional Cooperative Prevention Efforts - Disseminate Findings from Core Institute Survey to Promote & Initiate Institutional Action & Change
	1B Increase Delay of Onset of Use of Alcohol & Other Drugs by Missouri Youth by One Year of Age by FY 2004 in Pilot Sites	
2 Reduced Rate of Suicides In Missouri	2A Reduce Rate of Suicides Among Young Missourians by 6% of Nationwide Rate by 2006	- Begin Implementation of MO Suicide Prevention Plan - Develop Jointly with DOH in 2001 - Train Professional Caregivers who Serve High-Risk Populations - Assure that Gatekeepers Utilize Resource & Referral Mechanisms - Coordinate Suicide Prevention Strategies with Substance Abuse Prevention Strategies in Outcome 1
	2B Reduce Rate of Suicides Among Elderly Males in Missouri by 9% of Nationwide Rate by 2006	
3 Children with Severe or Multiple Mental Health Problems Will Achieve Success Living in Their Communities	3A Increase Percentage of Days in School for Children & Youth Served in the Eastern Region System of Care by 25% in FY 2003	- Implement & Solidify System of Care Team in Eastern Region - Expand Capacities - Treatment Homes - Adolescent Independent Living - Respite & Family Supports - Duplicate System of Care Model Across State
	3B Increase Percentage of Days which Children in State Custody & Served by the Eastern Region System of Care Live in Their Own Homes or Homelike Environment by 30% in FY 2003	
	3C Increase Access to System of Care Teams for Children & Youth Served by Multiple State Departments by Establishing 5 Additional Teams in Other Areas of the State by FY 2003	
4 Improved Quality of Care for Department of Mental Health Consumers in Community Residential Placement	4A Decrease Rates of Injuries & Medication Errors in Community Residential Settings	- Collect Data Regularly on Incidents & Injuries of DMH Consumers in Community Residential Placement - Use Data to Trend & Identify Problems - Problem Providers - Problem Systems - Use Information for Indicative Corrective Action - Vendor Development - Training - Regulation - Implement Recruitment & Retention of Direct Care Workers - Salary & Benefits Enhancement - Training - Recognition Activities
	4B Reduce Staff Turnover in Community Residential Facilities	

KEY OUTCOME 1: Reduced Deaths & Injuries Associated With Substance Abuse Among Young Missourians

FIGURE 1

Trend in Missouri Alcohol & Drug Related Traffic Crash Deaths & Injuries
By Age Group
1995-2000



Source: Missouri Department of Mental Health, Division of Alcohol & drug Abuse Report on Missouri's Alcohol & Drug Abuse Problems, 7th Edition, January 2001.

I Why This Measure is Important

The use of alcohol and other drugs exacts a terrible toll on the lives of young Missourians. The abuse of alcohol, tobacco, prescription medications, and illegal drugs is the nation's (and Missouri's) number one health problem. In calendar Year 2000 alone, 2,804 of Missouri's young people were injured or killed in alcohol or drug related traffic crashes (Figure 1).

Research is beginning to help us understand who is most at risk, why they are at risk, and who would benefit most from prevention and intervention. For instance, young people who begin drinking alcohol are at increased risk for all types of unintentional injury. They are at increased risk for injury from alcohol-related traffic crashes and injury due to assault and violence. These young people also have an increased lifetime risk for alcohol dependence and drug addiction.

From a public health perspective, reduction of deaths and injuries associated with substance abuse is both a reasonable and necessary goal. However, it is also broad and ambitious, with many factors contributing to annual fluctuations in death or injury rates. With that in mind, the Department of Mental Health (DMH), Division of Alcohol and Drug Abuse (ADA) will monitor and report on these fluctuations but focus its attention on two contributing factors upon which state interventions are

expected to have a meaningful and measurable effect: 1) binge drinking among college students, and 2) age of first use of alcohol or other drugs by Missouri's youth.

II Trend Analysis

While all alcohol and drug-related traffic deaths and injuries in Missouri have actually declined over the past ten years (consistent with what is happening on the national scene) alcohol and drug-related traffic crash deaths and injuries in Missouri among people under 25 during the past five years does not show the same trend (Figure 1).

III How Missouri Compares to Others

Nationally, alcohol-related traffic fatalities fell almost 30% from 1986 to 1996. There were 16,189 alcohol-related traffic deaths in 1997, which represented 38.6% of total traffic fatalities, the lowest percentage on record. This rate is in marked contrast to rates for other years - 40.9% in 1996 and 57.3% in 1982. In 1999, there were an estimated 15,794 fatalities associated with the presence of alcohol, a decline of 0.9% from the 15,934 fatalities in 1998. The estimated rate of alcohol involvement among fatalities was 38%, the lowest rate since record keeping began in 1975.

Again, however, the trend among Missouri youth does not reflect this generally downward trend on the national scene.

With regard to Missouri, the unfortunate reality is that the rate of traffic fatalities and injuries among Missouri youth does not reflect this generally downward trend on the national scene. Figure 1 shows that the annual number of deaths and injuries among Missourians under the age of 25 has been fairly static since 1995.

IV Factors Influencing the Measure

There are many factors influencing deaths and injuries related to use of alcohol and other drugs. Among those that positively influence them are enhanced vehicle safety, seatbelt usage, road improvements, greater public awareness of the dangers of heavy drinking and drug use, tougher laws, an effective Substance Abuse Traffic Offender Program (SATOP) and advances in medical care. Negative influences include the earlier onset of alcohol and drug use, increased rates of binge drinking among young people, trends in drug use (e.g., toward more dangerous drugs or those that are associated with higher crime rates), weaker family and neighborhood ties, decreasing influence of social institutions (e.g., churches), and widespread availability not only of drugs themselves but also the knowledge of how to produce them—often disseminated via the Internet.

V What Works

As was previously noted, there has been a decline in deaths due to traffic crashes associated with alcohol and other drug use. In the last decade, alcohol-related fatalities in the U.S. dropped from 24,050 in 1986 to 16,189 in 1997. This 32% drop in alcohol-related traffic deaths is generally attributed to stronger laws (particularly the new .08 laws), tougher enforcement and adjudication, and more effective public education. Americans understand the impaired driving problem, societal norms have changed, fewer people are driving after drinking, and more are getting caught when they do. Equally important, Americans support the enforcement of these laws and swift and fair sentencing of offenders. The Substance Abuse Traffic Offender Program (SATOP) is a Department of Mental Health program that provides assessment, education, intervention and referral to over 37,000 offenders per year.

What Works to reduce deaths and injuries associated with alcohol and drug use? The answers are as complex as the problem. Persons under the influence are injured at school or work. They die alone at home from accidental overdose. They are injured or killed in the process of buying or selling drugs. They are hospitalized after suffering trauma to vital organs from heavy alcohol or drug use. The sweeping cultural changes and radical legal and economic reforms that would be necessary in order to reduce deaths and injuries at the macro level are far beyond the scope of any one department of state government, and in fact beyond the powers of state government itself in a country with constitutional guarantees for certain freedoms.

Instead, the focus of DMH will be on young people killed or injured due to alcohol or drug use. Two factors that clearly contribute to deaths and injuries associated with alcohol and other drug use are 1) college binge drinking, and 2) age of first use of alcohol and other drugs. It is well known that too many college students die from accidents or medical complications caused by acute alcohol intoxication. Too many children and adolescents use alcohol and other drugs while their brains and other organs are still developing, causing significant and even permanent impairment in mental and emotional functioning, later life chemical dependency or mental illness, and premature death.

VI Concerns

In a culture that prizes escapism as much as it demands immediate relief from suffering, alcohol and other drugs have a steady hold. Normal adolescent development brings a desire to be rebellious. This rebelliousness often takes the form of alcohol or other drug use. Cultural, social, and developmental pressures to use and abuse chemicals are tremendous.

Second, statewide statistics for death and injuries related to substance abuse are influenced by so many variables that for any single stakeholder it would be as foolish to claim victory for positive changes as it would be unreasonable to assume blame

for downturns. The best that can be done is to target key contributing factors, like those mentioned in previous sections, for measurement and intervention.

DATA TABLES

TABLE 1

Missouri Resident Deaths with Medical Etiology* of Alcohol or Other Drug Use
Per 100,000 Population

ICD & Age Category**	1991	1992	1993	1994	1995	1996	1997	1998	1999
Death Rate Under Age 18 Based On ICD-9***	0.38	0.52	0.59	0.22	0.22	0.43	0.14	0.07	
Death Rate Under Age 18 Based On ICD-10****									0.50
Death Rate Ages 18-24 Based On ICD-9	2.94	3.36	2.18	1.79	2.80	3.43	3.01	3.73	
Death Rate Ages 18-24 Based On ICD-10									4.80
<i>*Etiology, the cause or origin of a disease or disorder as determined by medical diagnosis</i> <i>**Rates are number of deaths per 100,000 population in age group</i> <i>**ICD-9, International Classification of Diseases, 9th revision</i> <i>***ICD-10, International Classification of Diseases, 10th revision</i>									

Source: Missouri Department of Health.

TABLE 2

Missouri Resident Crash Deaths & Injuries with Alcohol or Other Drug Etiology
Per 100,000 Population

Age Category*	1995	1996	1997	1998	1999	2000
Crash Death & Injury Rate Under Age 18	66.89	70.64	65.77	57.91	62.02	60.73
Crash Deaths & Injury Rate Ages 18-24	403.49	388.00	379.03	371.97	364.66	N/A
<i>* Rates are number of deaths per 100,000 population in age group</i>						

Source: Missouri Department of Public Safety, Missouri State Highway Patrol, (Statistical Analysis Center).

TABLE 3

Missouri Resident Visits to Hospitals & Emergency Rooms
with Medical Etiology of Alcohol or Other Drug Abuse

Hospital & ER Visits	1994	1995	1996	1997	1998	1999
Alcohol & Drug Related Hospital & Emergency Room Rate Per 100,000 Population	1,245	1,021	1,077	1,104	1,157	1,182

Source: Missouri Department of Health.

VII Description of Measure

Deaths: Missouri resident under 18 deaths and 18-24 deaths per 100,000 population, with a medical etiology of alcohol or other drug use as defined by ICD-10 codes developed by the National Center for Health Statistics. Data is collected by the Missouri Department of Health, Center for Health Information Management and Evaluation.

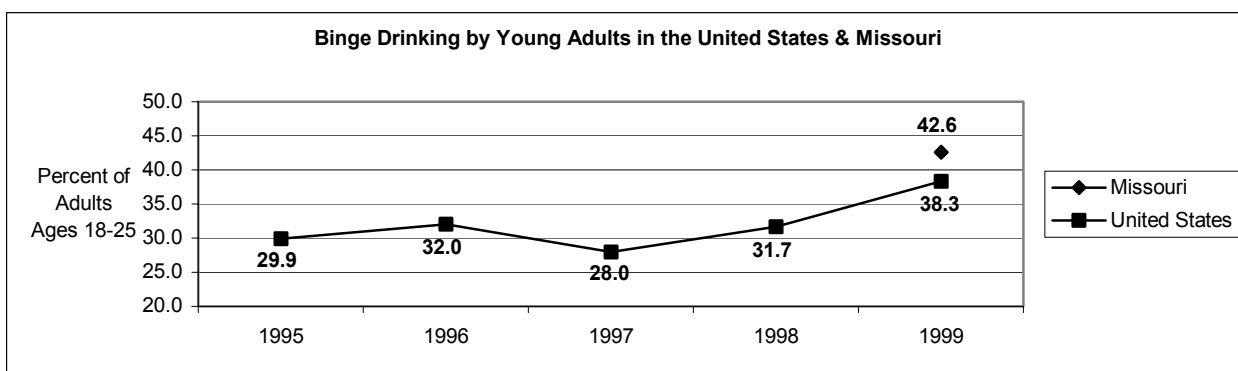
Hospital and Emergency Room Visits: Missouri resident visits per 100,000 population, to hospitals and emergency rooms with a medical etiology of alcohol or other drug use as defined by a set of ICD-9-CM codes based on the Healthy People 2000 tracking system. Data is collected by the Missouri Department of Health, Center for Health Information Management and Evaluation.

Again, although statewide deaths and injuries will be monitored and reported, the many variables contributing to their rise or fall on a year-to-year basis are impossible to control by any single government agency or by government built on a foundation of individual freedom and personal responsibility.

KEY OBJECTIVE 1A: Decrease Binge Drinking Among College Students

FIGURE 2

Trend in Binge Drinking* Among US Population Ages 18-25, 1995-1999, & Missouri Comparison for 1999



Source: National Household Survey on Drug Abuse.

* Binge Drinking is defined in the National Household Survey as consuming five or more drinks on one occasion at least once in the past 30 days.

I Why This Measure is Important

Colleges and universities should be safe places where students thrive academically and grow personally and socially. One of the biggest obstacles to college students' success is the abuse of alcohol and other drugs. Substance abuse is one of the nation's leading problems and college campuses are not in any way buffered. In fact, many young adults see their drinking and use of other drugs increase during college years.

Binge alcohol use is a major problem on college and university campuses. It is variously defined in the research literature, but for our purposes will match the Core Institute definition as consuming five or more drinks in one sitting within a two-week period. Students who binge drink are more likely to damage property, have trouble with authorities, miss class, have hangovers, and experience injuries and even death (Wechsler, 1994.) About one-third of college students report drinking for the sole purpose of getting drunk. The average consumption of alcoholic beverages is 34 gallons per student per year (Center on Addiction and Substance Abuse, CASA, 1994). It is estimated that 40% of academic problems, 29% of dropouts, 80% of vandalism, 90% of Greek hazing deaths, and 90% of date rapes are alcohol or other drug related.

II Trend Analysis

Information measuring binge drinking at all Missouri Public College/Universities is currently being compiled for the first time. The report is not yet available; however single entities like the University of Missouri have collected data measuring binge drinking for the past ten years. These data suggest that binge drinking by Missouri college students is holding steady at around 50%.

III How Missouri Compares to Others

Among 18-25 year-olds, 42.6% of Missouri residents reported binge drinking compared to 38.3% nationally.

National averages from the Harvard School of Public Health College Alcohol Study indicates binge drinking among college students at a rate of:

- 44% in 1993;
- 42.7% in 1997; and
- 44% in 1999.

As mentioned above, Missouri estimates based on the University of Missouri experience suggests a fairly steady rate of 50% for the same periods. The Core Survey described later will provide more consistent and reliable data about binge drinking on Missouri campuses.

IV Factors Influencing the Measure

Bars surround campuses and actively market to college students. Drink specials and private parties make drinking inexpensive. Since the regions with heaviest drinking are colder climates, there is speculation that colder climates lead to more drinking due to fewer outdoor recreational opportunities. Several large breweries have headquarters in the Midwest region of the country, including Busch, Miller and Coors. Finally, college campuses are reflective of the overall culture.

V What Works

Social norming and social marketing in combination with environmental management appear to be the most promising ways to reduce binge drinking.

- *Social norms* are people's beliefs about the attitudes and behaviors that are normal, acceptable, or even expected in a particular social context. In many situations, people's perception of these norms will greatly influence their behavior. Therefore, when people misperceive the norms of their group—that is, when they inaccurately think an attitude or behavior is more (or less) common than is actually the case—they may choose to engage in behaviors that are in sync with those false norms. For example, studies have shown that college

students overestimate how much their peers drink. Social norming means getting information to college students about actual normative rates of consumption of alcoholic beverages.

- *Social marketing* is the planning and implementation of programs designed to bring about social change using concepts from commercial marketing.
- *Environmental management* refers to an approach grounded in the principle that student decisions about substance use are shaped by the physical, social, economic, and legal environment in which that behavior occurs; that environment can be shaped by committed prevention advocates, higher education, government officials, and others. Environmental management articulates the need to broaden prevention approaches beyond traditional educational programs to include a range of strategies for changing the campus and community environment.

VI Concerns

Again, in a culture with an ambivalent stance toward alcohol and other drugs - promoting individualism and personal responsibility on one hand, demanding immediate gratification and instant relief from suffering on the other - reducing substance use and abuse in any given setting is a significant challenge. A combination of factors must come together at once in order to achieve measurable results.

VII Description of Measure

The University of Missouri-Columbia is under contract with ADA to develop a coalition called Partners in Prevention, which includes 12 state-funded college and university campuses in Missouri. This coalition targets 39.8% of all Missouri college students. All 12 campuses participate in the Core Institute of Southern Illinois University survey on at least an annual basis. The survey provides data related to binge drinking, including:

- The percent of college students participating in the survey who report consuming five or more drinks in one sitting within two weeks prior to the survey; and
- Reported average number of drinks consumed per week by college students participating in the Core Institute survey.

The instrument used came to be known as the Core Alcohol and Drug Survey because it was designed to be the centerpiece or "core" of potentially lengthier studies that institutions might conduct on their campuses. It was specifically designed to be inexpensive, easily administered, of high quality, statistically reliable and valid, and comparable to other surveys in the field. The content of the Core Survey was developed on the basis of both theoretical assumptions regarding

alcohol and drug use in the higher education setting and on previous research reported in the literature.

The first statewide Core Alcohol and Drug Survey of Missouri public college students has been completed and data analysis should be finished by October 15, 2001. The analysis will provide the baseline for college binge drinking rates. Targets for future years will be determined at that time.

VIII Key Strategies

A. Implement intergovernmental contract with the University of Missouri Curators for a comprehensive program of science-based prevention services to reduce binge drinking among Missouri's college students.

1. Information Dissemination: This strategy provides awareness and knowledge of the nature and extent of substance use, abuse, and addiction and their effects on individuals, families, and communities. It also provides knowledge and awareness of available prevention programs and services. Information dissemination is characterized by one-way communication from the source to the audience, with limited contact between the two. Examples include:

- ♦ Prevention resource center/library with educational posters, brochures, videos, books, etc;
- ♦ Social marketing materials targeted for a statewide social norming effort, in addition to materials specific to individual campuses;
- ♦ Quarterly newsletter to Partners in Prevention coalition members;
- ♦ Partners in Prevention website;
- ♦ Freshman orientation;
- ♦ Information tables held regularly in student union;
- ♦ Health fairs; and
- ♦ Safe Spring Break survival kits, aimed at helping college students make smart decisions for themselves during spring break.

2. Education: This strategy involves two-way communication and is distinguished from the information dissemination strategy by the fact that interaction between the educator/ facilitator and the participants is the basis of its activities. Activities under this strategy aim to affect critical life and social skills, including decision-making, refusal skills, critical analysis (e.g., of media messages), and systematic judgment abilities. Specific strategies include:

- ♦ On-going training opportunities for higher education professionals and students on effectively preventing alcohol and other drug abuse among Missouri college students:

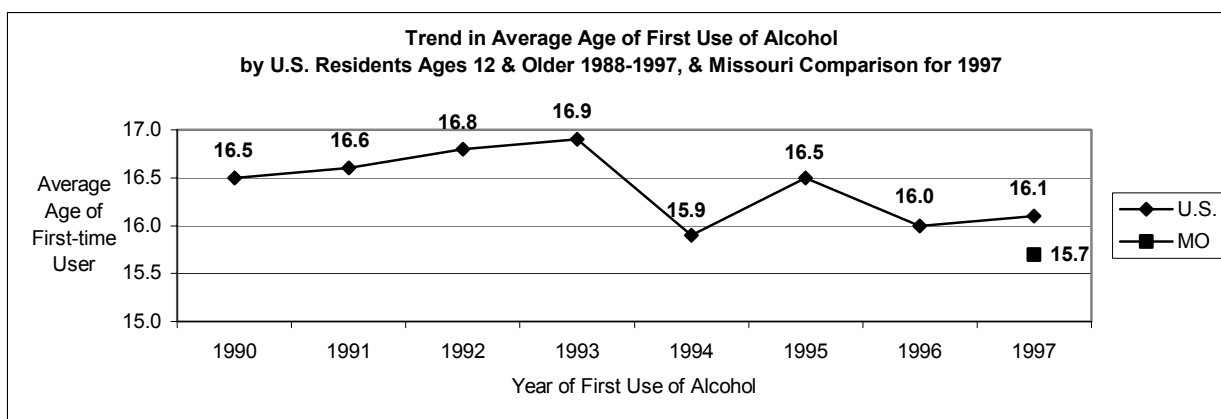
- Monthly meetings/trainings for Partners in Prevention coalition members;
 - Peer educators presenting prevention education programs to Greek houses, residence halls, and high schools; and
 - *Don't Cancel that Class initiative* – Prevention staff “fill-in” with an alcohol-related program when professors can't make it to their class.
3. Alternatives: This strategy provides for the participation of target populations in activities that exclude substance use. The assumption is that constructive and healthy activities offset the attraction to - or otherwise meet the needs usually filled by - alcohol and drugs and would therefore minimize resort to the latter. Examples include:
- ♦ Making money available to student groups to help provide alternative, alcohol-free programming to students, such as:
 - Campuses holding numerous alcohol/drug-free events.
4. Problem Identification and Referral: This strategy aims at identification of those who have indulged in illegal/age-inappropriate use of tobacco or alcohol and those individuals who have indulged in the first use of illicit drugs in order to assess if their behavior can be reversed through education. It should be noted, however, that this strategy does not include any activity designed to determine if a person is in need of treatment. For example:
- ♦ Administrative sanctions to address alcohol violations on campus, including education, intervention, and referral, and treatment; and
 - ♦ Parental notification letters to parents of students engaging in alcohol related behavior.
5. Community-Based Process: This strategy aims to enhance the ability of the community to more effectively provide prevention and treatment services for substance abuse disorders. Activities in this strategy include organizing, planning, enhancing efficiency and effectiveness of services implementation, interagency collaboration, coalition building, and networking. Example:
- ♦ Community Action Teams addressing the issues of access to alcohol, detection, intervention and referral, and changing the campus culture.
6. Environmental: This strategy establishes or changes written and unwritten community standards, codes, and attitudes, thereby influencing incidence and prevalence of substance abuse in the general population. This strategy is divided into two subcategories to permit distinction between activities that center on legal and regulatory initiatives and those that relate to the service and action-oriented initiatives:

- ♦ Community Action Teams addressing the issues of access to alcohol, drink specials:
 - Social Marketing Campaigns - Planning and implementation of programs designed to bring about social change using concepts from commercial marketing.
- B. Disseminate findings from Core Institute Survey to foster institutional action where necessary and promote social norming.

KEY OBJECTIVE 1B: Increase Delay of Onset of Use of Alcohol & Other Drugs by Missouri Youth by One Year of Age by FY 2004 In Pilot Sites

FIGURE 3

Trend in Average Age of First Use* of **Alcohol** by US Residents Ages 12 & Older 1988-1997 & Missouri Comparison for 1997

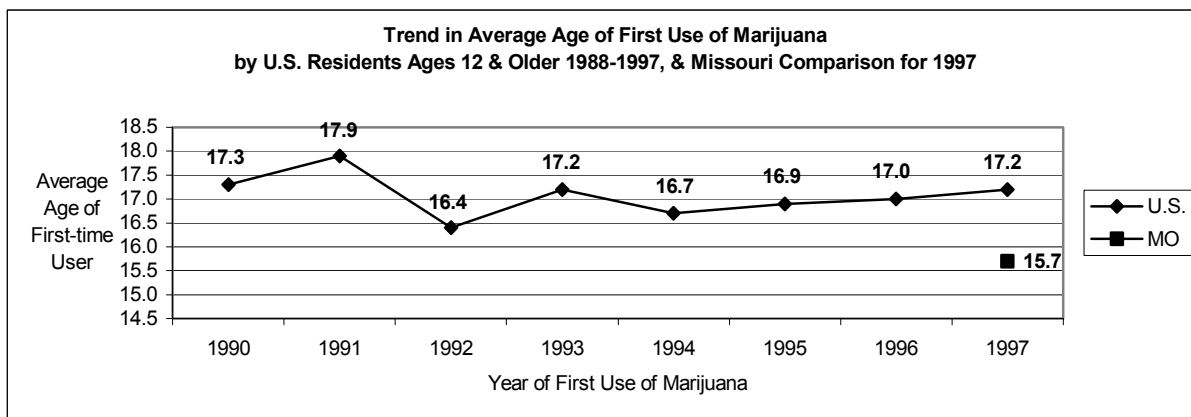


Source: National Household Survey on Drug Abuse.

FIGURE 4

Trend in Average Age of First Use* of **Marijuana** by US Residents Ages 12 & Older 1988-1997 & Missouri Comparison for 1997

Source: National Household Survey on Drug Abuse.



I Why This Measure is Important

Use of alcohol and other drugs by youth can cause significant impairment to the developing brain and is directly correlated with later life chemical dependency, with well-established links to social and legal problems, mental illness, and premature death.

The human brain is not fully developed until age 23. Children and young adults are exquisitely sensitive to the effects of alcohol and other drugs. Abuse of alcohol and other drugs at an early age can alter both the function and structure of the human brain. Children who begin using substances on a regular basis fail to learn pro-social behaviors and coping skills that will carry them into successful adulthood. They do poorly at home, poorly at school, and poorly in interpersonal relationships. They are at significant risk for injury and death from accidents, overdose, and medical complications.

II Trend Analysis

Missouri trend data for age of first use data is not yet available. However, we have recently begun and will continue to collect such data on Missouri students in grades 6, 8, 10, and 12 who have ever used alcohol or other drugs. The data shows that, in calendar year 2000, the average age of first use of alcohol in those grades was 12.77 years. Average age for first use of cigarettes was 12.18 years and average age for first use of marijuana was 13.63 years (Table 5).

TABLE 5

Age of First Use* of Substances by Missouri Youth in Grades 6, 8, 10, & 12

Average Age of First Use in Missouri	Alcohol	Cigarettes	Marijuana
2000	12.77	12.18	13.63

Source: Missouri 2000 Student Survey.

** Age of first use as measured by the National Household Survey (Fig. 3 & 4) differs from data in the Missouri 2000 Student Survey (Table 5) because of differences in groups surveyed and types of questions asked. The student survey is more accurate for youth in grades 6, 8, 10, and 12. Both surveys show that Missouri youth begin using alcohol and other drugs at an earlier age.*

III How Missouri Compares to Others

According to the National Household Survey, among adolescents and adults ages 12 and older who have ever used alcohol or marijuana, the average age of first use is lower (younger) in Missouri than the national average (Figures 3,4 and Table 5). The mean age of first use of alcohol is 16.1 years nationally compared to 15.7 in Missouri. Therefore, people in Missouri start drinking alcohol about four months earlier than the national average. The mean age of first use of marijuana is 17.2

nationally compared to 15.7 in Missouri, indicating that people in Missouri start using marijuana about 18 months earlier than the national average. Many of the dangers associated with early use of alcohol and other drugs are disproportionately worse the earlier the use starts. Missourians start using alcohol and other drugs earlier than the national average and therefore are at greater risk for problems.

IV Factors Influencing the Measure

- Parental involvement/family effects
- Cultural and spiritual factors
- Neighborhood effects
- Institutional influences
- Availability of alcohol and other drugs
- Risk and protective factors

V What Works

The “National Survey of American Attitudes on Substance Abuse VI: Teens,” February 2001 presented findings of the sixth annual CASA National Survey of American Attitudes on Substance Abuse. The survey of 1,000 teens (age 12-17) reveals that parents who are “hands-on” (who have established a household culture of rules and expectations for their teen's behavior and monitor what their teens do, what television shows they watch, what they access on the Internet, what music they purchase, and where they go on evenings and weekends) raise children who are less at risk of smoking, drinking, and using drugs. Contrary to conventional wisdom, teens in “hands-on” households are more likely to have an excellent relationship with their parents than teens with “hands-off” parents. The survey concluded that parents should be parents to their teenagers, not pals.

Risk and Protective Factors research provides the basis for state and national prevention plans:

- ❑ Several types of treatment approaches specifically designed for adolescents have demonstrated success and promise as best practice models. The Adolescent Treatment Models (ATM) project is currently conducting a 3-year research project to examine 11 specific types of adolescent treatment programs to determine cost-effectiveness and outcomes.
- ❑ Prevention Programs that involve the family and treatment programs that involve the family both show positive results.

VI Concerns

Once again, in a culture with an ambivalent stance toward alcohol and other drugs (promoting individualism and personal responsibility on one hand, demanding immediate gratification and instant relief from suffering on the other) reducing substance use and abuse in any given population or target group is a significant challenge. A combination of factors must come together at once in order to achieve measurable results, and many of those factors are beyond the reach of any single government agency or even state government itself.

DATA TABLE

TABLE 6

Age of First Alcohol/Drug Use Among Persons Admitted for Treatment
in Missouri Substance Abuse Programs

Drug of Choice	FY2000 Admissions for Treatment	Started Using Under Age of 13	Percentage Under 13
Alcohol	14,038	3,066	22.0%
Marijuana	9,088	2,381	26.2%
Cocaine/Crack	6,740	262	3.9%
Methamphetamine	2,918	133	4.6%
Heroin	1,684	50	3.0%
Other Drugs*	866	83	9.7%

Source: Status Report on Missouri's Alcohol and Drug Problems, 7th Ed., January 2001.

* Includes PCP, tranquilizers, amphetamines, other opiates, inhalants, LSD, other hallucinogens, etc.

VII Description of Measure

The average age of first use of alcohol, cigarettes, and marijuana among students who have ever used these substances is measured by the Missouri Student Survey administered by ADA and Community 2000 Support Centers in cooperation with the Department of Elementary and Secondary Education. The survey is conducted every other year (even numbered years) for sixth, eighth, tenth, and twelfth grade students statewide. The most recent survey included 10,000 students.

The targeted increase has been aggressively set for the 6 pilot sites identified in the discussion of Key Strategies located on the next page. The Department seeks to increase the age of onset by 1 year of age by FY 2004.

VIII Key Strategies

- A. Implement with DESE School-based prevention and intervention initiative beginning with 2001-2002 school year in six sites throughout the State, with expansion to other sites in subsequent years.
 - 1. The Departments of Elementary and Secondary Education and Mental Health are developing a science-based substance abuse prevention and intervention initiative with local school systems. Planning, decision-making, implementation and operation and ongoing monitoring of the initiative will be shared by both departments. The Departments to date have conducted joint presentations, focus groups, planning meetings, as well as other planning activities.
 - 2. The school based prevention and intervention initiative will be funded by a combination of general revenue, Alcohol and Drug Abuse block grant funds, Safe and Drug Free School funding and Medicaid. Universal prevention and selective intervention will be funded with Alcohol and Drug Abuse block grant, Safe and Drug Free School, and state general revenue funds. Medicaid may be used to fund some selective intervention services. Indicated services will be funded with Alcohol and Block grant funds, general revenue and Medicaid.
 - 3. School age children, kindergarten through twelve, (regardless of income level) are the target population. Service limitations will exist for some age groups due to existing program limitations. Anticipated outcomes include reduction of substance abuse by Missouri's children and youth; increase in academic achievement; decrease in acts of violence; strengthening of bonds between families, communities and the schools; and delay of onset of first use of alcohol and other drugs.
- B. Pending receipt of the State Incentive Grant, implement interdepartmental cooperation in prevention planning and programming. The Governor has applied for a State Incentive Cooperative Agreement (SIG grant) from the Center for Substance Abuse Prevention (CSAP), Substance Abuse and Mental Health Services Administration (SAMHSA). DESE and DMH will be members of the SIG Advisory Committee, which will develop and oversee implementation of plans to prevent substance use by children 12 to 17 years of age.
- C. Implement public awareness activities as part of the ongoing statewide prevention plan.
- D. Implement science based prevention programming addressing individual, peer, family, community and environmental risk factor domain.

KEY OUTCOME 2: Reduced Rate of Suicides in Missouri

I Why This Measure is Important

Suicide is a particularly awful way to die: the mental suffering leading up to it is usually prolonged, intense, and unpalliated. There is no morphine equivalent to ease the acute pain, and death not uncommonly is violent and grisly. The suffering of the suicidal is private and inexpressible, leaving family members, friends, and colleagues to deal with an almost unfathomable kind of loss, as well as guilt. Suicide carries in its aftermath a level of confusion and devastation that is, for the most part, beyond description.

Kay Redfield Jamison

Suicide exacts an enormous toll. Our State loses 700 lives to this tragedy each year; another 6700 receive emergency care after attempting to take their own lives.

Persons who experience the loss of someone close as a result of suicide experience tremendous emotional trauma. Suicide is a special burden for certain age, gender, and ethnic groups, as well as particular geographic regions.

Suicide is very costly to the state. In addition to the emotional suffering experienced by family members of those who have died by suicide and the physical pain endured by those who have attempted suicide, there are financial costs. However, attempts to compute such costs on a national basis are based on incomplete data (e.g., underreporting of suicides and an absence of reliable data on suicide attempts); in addition, such estimates, like economic analyses of other health problems, are of necessity based on certain assumptions, and the accuracy of these cannot always be assured. Consequently, there is no firm consensus on the true dollar costs of suicide. If we were to extrapolate from one economic analysis, however, we could “guesstimate” the total economic burden of suicide in Missouri, in 1995, to have been \$2.2 billion; this includes medical expenses of \$73.6 million, work-related losses of \$545.6 million, and quality of life costs of \$1.6 billion (estimated from Miller et al., 1999).

Only recently have the knowledge and tools become available to approach suicide as a preventable problem with realistic opportunities to save many lives.

Nearly half of the States are engaged in suicide prevention and many have already committed significant resources to implement programs.

II Trend Analysis

While the overall suicide rate in the United States is decreasing, the increasing rates for various age, gender and ethnic groups indicate disturbing trends. The suicide rate, which was 21.1 per 100,000 in 1976 declined to 10.8 in 1996. Many communities of Native Americans have long had elevated suicide rates. On Average, 85 Americans die from suicide each day.

Missouri's data, like other states is not fully adequate to the task of accurately describing the extent and nuances of suicide. Unfortunately, secrecy and silence diminish the accuracy and amount of information available about persons who have completed suicide – information that might help prevent other suicides. It is generally agreed that not all deaths that are suicides are reported as such. For example, deaths classified as homicide or accidents, where individuals may have intentionally put themselves in harm's way are not included in suicide rates. However, Missouri's existing data does provide us with a good starting point.

On the average, 59 Missourians die from suicide each month. Although more females attempt suicide than males, males are at least five times more likely to die from suicide. The most frequent cause of suicide deaths was firearms. In 1997 they were used in 65% of the suicides. Firearms were used most often by 15-24 year olds and those aged 65 and over. After firearms, poisoning was the next most frequently use method of killing oneself (18%), followed by suffocation and strangulation (13%), (MMVS, Vol.32, #12, Feb. 1999).

During 1997, blacks in Missouri visited hospitals for self-inflicted injuries at a rate that was 12% higher than that for whites: 137 per 100,000 population versus 122. In contrast, the death rate for suicides was almost two times higher for whites than for blacks: 14.1 versus 7.4 (MMVS, Vol.32, #12, Feb. 1999).

Males were much more likely to die of suicide. In 1997, males had a suicide rate of 21.6 per 1000. This was nearly five times the female rate of 4.2. Males aged 65 and over had the highest suicide rate at 41.4. Among females the rate reached a high of 6.7 in 25-44 year olds (MMVS, Vol.32, #12, Feb. 1999).

Men complete suicide more often than women, whereas females make more attempts. In 1997, males made up 83% of the 710 suicides. Females were nearly 50% more likely than males to be hospitalized or visit an emergency room for a self-inflicted injury. The rate for self-injury was highest among 15-24 year olds for both genders (MMVS, Vol.32, #12, Feb. 1999).

III How Missouri Compares to Others

Missouri's suicide rate is higher than the national. In 1997 the U.S. whole population rate was 10.6 suicides per 100,000 persons while Missouri had a rate of 12.4 deaths per 100,000 persons average (Table 1). When suicides were analyzed over a four-

year period from 1990 to 1994 Missouri ranked in the second highest quartile nationally. With an age adjusted suicide rate of 12.6 deaths per 100,000, this was higher than any of the surrounding mid-western states. Missouri's rate was 15% higher than the Midwest average of 10.9 deaths per 100,000 and 10% higher than the national average of 11.8 deaths per 100,000.

TABLE 1

Nationwide versus Missouri Suicide Rates (Age-Adjusted) By Year
Number of Suicides per 100,000 Population

Year	Nationwide	Missouri	Missouri Percentage Above National Rate
1990	11.7	13.0	11.1%
1993	11.8	12.6	6.8%
1994	11.2	13.4	19.6%
1995	11.2	13.0	16.1%
1996	10.8	13.6	25.9%
1997	10.6	12.4	17.0%
1998	10.0	12.2	22.0%

Source: Missouri Department of Health, Centers for Disease Control & Prevention.

IV Factors Influencing the Measure

Suicide is an outcome of complex interactions among neurobiological, genetic, psychological, social, cultural, and environmental risk and protective factors. Multiple risk and protective factors interact in suicide prevention.

Risk factors may be thought of as leading to or being associated with suicide; that is, people "possessing" the risk factors are at greater potential for suicidal behavior. Protective factors, on the other hand, reduce the likelihood of suicide. They enhance resilience and may serve to counterbalance risk factors. Risk and protective factors may be biopsychological, environmental, or sociocultural in nature.

However, the impact of some risk factors can clearly be reduced by certain interventions (such as providing lithium for manic depressive illness or strengthening social support in a community)(Baldessarini, Tando, Hennen, 1999). Risk factors that cannot be changed (such as a previous suicide attempt) can alert others to the heightened risk of suicide during periods of the recurrence of a mental or substance abuse disorder or following a significant stressful life event (Oquendo *et al.*, 1999).

Measures that enhance protective factors play an essential role in preventing suicide. However, positive resistance to suicide is not permanent. Therefore, programs that support and maintain protection against suicide should be ongoing.

◀ Risk Factors for Suicide

◇ Biopsychosocial Risk Factors

- ◆ Mental disorders, particularly mood disorders, schizophrenia, anxiety disorders and certain personality disorders
- ◆ Alcohol and other substance use disorders
- ◆ Hopelessness
- ◆ Impulsive and/or aggressive tendencies
- ◆ History of trauma or abuse
- ◆ Some major physical illnesses
- ◆ Previous suicide attempt
- ◆ Family history of suicide

◇ Environmental Risk Factors

- ◆ Job or financial loss
- ◆ Relational or social loss
- ◆ Easy access to lethal means
- ◆ Local clusters of suicide that have a contagious influence

◇ Sociocultural Risk Factors

- ◆ Lack of social support and sense of isolation
- ◆ Stigma associated with help-seeking behavior
- ◆ Barriers to accessing health care, especially mental health and substance abuse treatment
- ◆ Certain cultural and religious beliefs (for instance, the belief that suicide is a noble resolution of a personal dilemma)
- ◆ Exposure to, including through the media, and influence of others who have died by suicide

◀ Protective Factors for Suicide

- ◆ Effective clinical care for mental, physical, and substance use disorders
- ◆ Easy access to a variety of clinical interventions and support for help-seeking
- ◆ Restricted access to highly lethal means of suicide
- ◆ Strong connections to family and community support
- ◆ Support through ongoing medical and mental health care relationships
- ◆ Skills in problem solving, conflict resolution, and nonviolent handling of disputes
- ◆ Cultural and religious beliefs that discourage suicide and support self-preservation

V What Works

Preventing suicide requires a comprehensive and integrated approach to reducing the loss and suffering from suicide and suicidal behaviors across the life course. It encompasses the promotion, coordination, and support of activities that will be implemented across the state as culturally appropriate, integrated programs for suicide prevention among Missourians at state, regional, tribal, and community levels.

Comprehensive suicide prevention programs are believed to have a greater likelihood of reducing the suicide rate than are interventions that address only one risk or protective factor, particularly if the program incorporates a range of services and providers within a community. Comprehensive programs engage community leaders through coalitions that cut across traditionally separate sectors, such as health and mental health care, public health, justice and law enforcement, education and social services. The coalitions involve a range of groups, including faith communities, civic groups, and business. Suicide prevention programs need to support and reflect the experience of survivors, build on community values and standards, and integrate local, cultural and ethnic perspectives (U.S. Department of Health and Human Services, 1999). Comprehensive prevention programs:

- ❑ Draw attention to a wide range of actions so that specific activities can be developed to fit the resources and areas of interest of people in everyday community life as well as professionals, groups, and public agencies. As the eighth leading cause of death among Americans, suicide affects families and communities everywhere across the nation. Suicide prevention is everyone's business.
- ❑ Seek to integrate suicide prevention into existing health, mental health, substance abuse, education, and human services activities. Settings that provide related services, such as schools, workplaces, clinics, medical offices, correctional and detention centers, eldercare facilities, faith-based institutions, and community centers are all important venues for seamless suicide prevention activities.
- ❑ Guide the development of activities that will be tailored to the cultural contexts in which they are offered. While universal interventions are applicable without regard to risk status, universal does not mean that one size fits all. The cultural and developmental appropriateness of suicide prevention activities derived from these goals and objectives is a vital design and implementation criteria.
- ❑ Seek to eliminate disparities that erode suicide prevention activities. Health care disparities are attributable to differences such as race or ethnicity, gender, education or income, disability, age, stigma, sexual orientation, or geographic location.

- ❑ Emphasize early interventions to reduce risk factors for suicide and promote protective factors. As important as it is to recognize and help suicidal individuals, progress depends on measures that address problems early and promote strengths so that fewer people become suicidal.
- ❑ Seek to build the State's capacity to conduct integrated activities to reduce suicidal behaviors and prevent suicide. Capacity building will ensure the availability of the resources, experience, skills, training, collaboration, evaluation, and monitoring necessary for success.

A broad public/private partnership is essential for developing and implementing this outcome. Interwoven are three key ingredients for action to improve suicide prevention:

- A knowledge base;
- The public will to support change and generate resources; and
- A social strategy to accomplish change.

Adopting this outcome provides an opportunity to convene public and private partners across many sectors of society – government, public health, education, human services, religion, voluntary organizations, advocacy, and business - to sustain a true, statewide effort.

Department of Mental Health in partnership with the Department of Health is in the process of finalizing a state suicide prevention plan using statewide community input and participation of other state agencies to achieve the comprehensive community based approach necessary for effective prevention.

VI Concerns

Understanding the interactive relationship between risk and protective factors in suicidal behavior and how this interaction can be modified are challenges to suicide prevention (Móscicki, 1997). Unfortunately, the scientific studies that demonstrate the suicide prevention effect of altering specific risk or protective factors remain limited in number.

Efficacy studies test whether a preventive or treatment intervention works under ideal conditions. It is frequently difficult to conduct efficacy studies, although in the absence of such studies, if an intervention does not work, there is no way to know if that is because the program idea was flawed or because the implementation was flawed.

The interventions recommended here were developed by a national expert consensus process lasting over two years under the leadership of Surgeon General David Satcher. They are endorsed at the “best practices” for suicide prevention.

While data provide an overall view of the problem, State and local suicide rates vary considerably from national rates. Local data are key to effective prevention efforts. It is important to note, however, that local suicide rates, due to the significant fluctuations that occur in small populations, are often not useful in evaluating the effectiveness of suicide prevention programs in the short-run. “Proxy” measures may work better, including changes in risk and protective factor.

Over the last fifty years, suicide rates have been quite stable over the whole population. Changing Missouri’s statewide suicide rate will require significant effort and resource over a long timeframe. It is unrealistic to expect significant changes without committing significantly more resources over a period of at least five to eight years. Reducing the suicide rate for young Missourians and elderly men in Missouri will require multiple prevention activities in most communities over several years. Many of the risks and protective factors for suicide and therefore the interventions to address them are the same as those for substance abuse. The suicide prevention and substance abuse prevention initiatives need to be coordinated so that their messages and interventions are complementary and mutually reinforcing.

VII Description of Measure

It is generally agreed that not all deaths that are suicides are reported as such. Deaths may be misclassified as homicides or accidents where individuals have intended suicide by putting themselves in harm’s way and lack of evidence does not allow for classifying the death as suicide. Other suicides may be misclassified as accidental or undetermined deaths in deference to community or family. Many studies suggest that the actual suicide rate is considerably higher than recorded (Clark *et al.*, 1992; Gibbs *et al.*, 1988; O’Carroll, 1989).

Whole Population Suicide Rate

- ◆ Definition: Suicide Rate in Missouri
- ◆ Numerator: Number of Suicides per Year Occurring in Missouri
- ◆ Denominator: Estimated Missouri Population

Data source for above numerators and denominators is the Department of Health death certificate file at the state data center and the census 2000 data and population projections from the Missouri State Census Data Center.

KEY OBJECTIVE 2A: Reduce the Rate of Suicides Among Young Missourians to within 6% of the Nationwide Rate by 2006

I Why This Measure is Important

For young people 15-24 years old, suicide is the third leading cause of death, behind unintentional injury and homicide. In 1996, more teenagers and young adults died of suicide than from cancer, heart disease, AIDS, birth defects, stroke, pneumonia and influenza, and chronic lung disease combined.

II Trend Analysis

Nationally, over the last several decades, the suicide rate in young people has increased dramatically. From 1952-1996, the incidence of suicide among adolescents and young adults nearly tripled, although there has been a general decline in youth suicides since 1994. From 1980-1996, the rate of suicide among persons aged 15 years increased by 14% and among persons aged 10-14 years by 100%. For African-American males aged 15-19, the rate increased 105%.

Among persons aged 15-19 years, firearm-related suicides accounted for 63% of the increase in the overall rate of suicide from 1980-1996.

The risk for suicide among young people is greatest among young white males; however, from 1980 through 1996, suicide rates increased most rapidly among young black males.

Males under the age of 25 are much more likely to commit suicide than their female counterparts. The 1996 gender ratio for people aged 15-19 was 5:1 (male/females), while among those aged 20-24 it was 7:1.

In a survey of students in 151 high schools around the country, the 1997 Youth Risk Behavior Surveillance System found that Hispanic students (10.7%) were significantly more likely than white students (6.3%) to have reported a suicide attempt. Among Hispanic students, females (14.9%) were more than twice as likely as males (7.2%) to have reported a suicide attempt. But Hispanic male students (7.2%) were significantly more likely than white male students (3.2%) to report this behavior.

In Missouri, the rate of suicide for 10-14 year olds over the last nine years has ranged from .3 per 100,000 (representing a single suicide) to 4.3 per 100,000 in 1996 (representing 9 suicides). Statistically these numbers are so small that the variation does not represent a significant trend over the nine- year period (Tables 2

& 3). For the next five- year period of life 15–19 years of age the suicide rate goes up significantly but it is still slightly less than the general population rate; whereas for persons 20-24 years old, the suicide rate is slightly more than the general population rate (Table 2). The combined rate for persons 15-24 years of age has remained essentially steady over the last ten years.

TABLE 2

Missouri Suicide Rates (Not Age-Adjusted)
Number of Suicides per 100,000 Population
1990-1999

Year	Statewide Rate	10-14 Years	15-19 Years	20-24 Years	Combined 15-24 Years	Males 65 & Over
1990	13.9	1.1	11.6	12.4	12.0	51.8
1991	13.9	0.3	13.6	14.8	14.2	44.8
1992	12.2	2.1	13.7	15.5	14.6	40.8
1993	13.3	1.5	12.0	17.0	14.5	45.0
1994	14.0	1.0	13.0	18.9	15.9	40.0
1995	13.6	1.8	13.1	20.9	16.9	41.6
1996	14.3	2.3	11.4	21.2	16.0	45.6
1997	13.1	2.2	10.9	12.8	11.8	41.1
1998	12.7	1.8	11.2	15.8	13.3	33.7
1999	12.8	1.7	12.6	16.0	14.2	38.5

Source: Missouri Department of Health.

TABLE 3

Number of Suicides in Missouri
1990-1999

Year	Statewide Total	10-14 Years	15-19 Years	20-24 Years	Combined 15-24 Years	Males 65 & Over
1990	714	4	42	45	87	146
1991	719	1	48	54	102	128
1992	635	8	48	57	105	118
1993	697	6	43	62	105	132
1994	740	4	48	68	116	118
1995	726	7	50	74	124	124
1996	768	9	45	73	118	137
1997	710	9	44	44	88	124
1998	691	7	46	55	101	102
1999	698	7	52	57	109	117

Source: Missouri Department of Health.

III How Missouri Compares to Others

In 1997 Missouri's suicide rate was higher in all three, five-year age brackets than the U.S. rate. Missouri's rate for combined 15-24 year olds is 12.4% higher than the US Rate.

TABLE 4
1997 Nationwide vs. Missouri Suicide Rates (Not Age Adjusted)
Number of Suicides per 100,000 Population

	Whole Population	10-14 yr	15-19 yr	20-24 yr	Combined 15-24 yr	Males 65 & Over
United States	11.3	1.6	8.7	12.4	10.5	35.0
Missouri	13.1	2.2	10.9	12.8	11.8	41.1

Source: MO Department of Health Centers for Disease Control & Prevention

% MO Rate greater than US Rate	15.9%				12.4%	17.4%
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IV Factors Influencing the Measure

Important risk factors for attempted suicide in youth are depression, alcohol or other drug use disorder, and aggressive or disruptive behaviors.

V What Works

See same section under Outcome 2.

VI Concerns

See same section under Outcome 2.

VII Description of Measure

The Department in cooperation with other agencies and community providers seeks to reduce the rate of suicides among young Missourians to within 6% of the nationwide rate of suicide by FY 2006. This would effectively reduce the margin of difference by half.

Taking the net difference in rates and dividing that by the US rate will calculate the percentage difference between the two rates.

Suicide Rate Among Persons Aged 15-24 in the United States will be obtained from the U.S. Centers for Disease Control and Prevention.

Suicide Rate Among Young Missourians*

- ♦ Definition: Suicide Rate Among Young Missourians
- ♦ Numerator: Number of Suicides in Persons Aged 15-24 Occurring in

- ♦ Denominator: Missouri, per Year
Estimated Missouri Population of Persons Aged 15-24
Years Old

Data source for above numerators and denominators is the Department of Health death certificate file at the state data center and the census 2000 data and population projections from the Missouri State Census Data Center.

** Persons aged 10-14 years of age were not included in this measure because their suicide rate is only one-tenth that of the included age range and the absolute numbers are so low as to be unlikely to influence a total measure and not amenable to a public health statistical intervention approach.*

VIII Key Strategies

- A. Begin implementation of recommendations from the Missouri Suicide Prevention Plan (see Appendix I on page 33). DMH in partnership with the Department of Health has developed a Missouri Suicide Prevention Plan. Community input was elicited at regional and statewide meetings.
 - 1. DMH will initially focus on developing training and education opportunities for professional caregivers who provide services to high-risk populations (Missouri Suicide Prevention Plan – Activity 2) and disseminating gatekeeper training (Missouri Suicide Prevention Plan – Activity 5). Gatekeepers might include anyone who by virtue of their daily activities comes into contact with individuals that may be at risk for suicide and then could potentially recognize a person at risk and refer them for help.
 - ♦ Train professional caregivers who serve high-risk populations.
 - Prepare educational materials for professionals about the risk factors and techniques to assist those at risk.
 - Provide training and education materials for Substance Abuse and Mental Health case managers caring for DMH consumers.
 - DMH, in conjunction with DOH, DESE, DOSS, and DOC will annually include information about suicide prevention in existing public forums targeting the following groups: social services, health and mental health professionals; school administrators, counselors, and classroom teachers.
 - ♦ Assure that gatekeepers utilize resources and referral mechanisms.
 - DMH will work in conjunction with other Departments to provide education and training to individuals annually that work in education, health (including mental health and aging), and social services.

- B. Increase geographic coverage and capacity of suicide prevention initiative targeted at adolescents and the elderly contracted through DMH, Division of Comprehensive Psychiatric Services (CPS).
 - 1. The initial \$150,000 pilot proposal elicited more good quality proposals than could be funded. There is unutilized expertise available in Missouri that could be rapidly put in place to provide suicide prevention interventions for a larger number of communities across the state.
 - 2. Reducing the suicide rate for young Missourians and elderly men in Missouri will require multiple prevention activities in most communities over several years. One or more new budget items will be proposed to build Missouri's suicide prevention capacity sufficiently to make a difference.
- C. Increase coordination of suicide prevention strategies with strategies outlined in Key Outcome 1: Reduced Deaths and Injuries Associated with Substance Abuse.
 - 1. Substance abuse prevention activities are also suicide prevention activities. Substance abuse is a major risk factor for suicide. The rate of suicide among persons with alcohol dependence is almost as high as for persons with depression. All phases of substance abuse prevention, including primary prevention and screening and early intervention for substance abuse problems will also have a direct contribution to suicide prevention. Focusing attention and resources on substance abuse prevention will be a strong primary prevention strategy for reducing Missouri's suicide rate.
 - 2. Primary prevention, focused on risk factors and protective factors are identical for both substance abuse and suicide prevention and are best integrated into a single approach. Screening and early intervention activities, while not identical, can be presented in a complementary, mutually reinforcing manner.
 - 3. Seek to have DMH prevention activities bid and managed through a single system.

KEY OBJECTIVE 2B: Reduce the Rate of Suicides Among Elderly Males in Missouri to within 9% of Nationwide Rate by FY 2006

I Why This Measure is Important

Suicide rates increase with age and are highest among Americans aged 65 years and older. While this age group accounts for only 13% of the U.S. population, Americans 65 or older account for 20% of all suicide deaths. In 1996, men accounted for 84% of suicides among persons aged 65 years and older. The highest suicide rates in the country that year were among white men over 85, who had a rate of 65.3 per 100,000. The elderly experience more loss related suicide risk factors than other populations including loss of:

- Income;
- Health;
- Social network;
- Job; and
- Health.

Nearly 5 million of the 32 million Americans aged 65 and older suffer from some form of depression. Depression, however, is not a “normal” part of aging.

II Trend Analysis

- ❑ Nationally suicide rates continue to remain high with a slight downward trend in older age groups, especially with white American males aged 65 years and older.
- ❑ From 1980-1996, the largest relative increases in suicide rates occurred among people 80-84 years of age. The rate for men in this age group increased 16% (from 43.5 per 100,000 to 50.6).
- ❑ Firearms were the most common method of suicide by both males and females, 65 years and older, 1996, accounting for 78% of male and 36% of female suicides in that age group.
- ❑ Suicide rates among the elderly are highest for those who are divorced or widowed. In 1992, the rate for divorced or widowed men in this age group was:
 - 2.7 times that for married men;
 - 1.4 times that for never married men; and
 - More than 17 times that for married women.

The rate for divorced or widowed women was:

- 1.8 times that for married women; and
 - 1.4 times that for never married women.
- Most elderly suicide victims (70%) have visited their primary care physician in the month prior to their committing suicide.
- In Missouri, the rate of suicide for males over age 65 is 3 to 4 times that of the general population. However, this rate is showing a downward trend over the past nine years, from 51.8 deaths per 100,000 in 1990 down to 38.5 deaths in 1999, the most recent year for which data in Missouri is available.

III How Missouri Compares to Others

In 1997 Missouri's suicide rate for males 65 years of age and older was 41.1 per hundred thousand, which is 17.4% higher than the U.S. rate of 35 per 100,000 for the same year (Table 4).

TABLE 4
1997 Nationwide vs. Missouri Suicide Rates (Not Age Adjusted)
Number of Suicides per 100,000 Population

	Whole Population	10-14 yr	15-19 yr	20-24 yr	Combined 15-24 yr	Males 65 & Over
United States	11.3	1.6	8.7	12.4	10.5	35.0
Missouri	13.1	2.2	10.9	12.8	11.8	41.1

Source: MO Department of Health Centers for Disease Control & Prevention

% MO Rate greater than US Rate	15.9%				12.4%	17.4%
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IV Factors Influencing the Measure

Risk factors for suicide among older persons differ from those among the young. In addition to a higher prevalence of depression, older persons are more socially isolated and more frequently use highly lethal methods. They also:

- Make fewer attempts per completed suicide;
- Have a high male-to-female ratio than other groups;
- Have often visited a healthcare provider before their suicide; and
- Have more physical illnesses.

V What Works

See same section under Outcome 2.

VI Concerns

See same section under Outcome 2.

VII Description of Measure

The Department in cooperation with other agencies and community providers seeks to reduce the rate of suicides among elderly male Missourians to within 9% of the nationwide rate of suicide by FY 2006. This would effectively reduce the margin of difference by half.

Taking the net difference in rates and dividing that by the US rate will calculate the percentage difference between the two rates.

Suicide Rate Among Male Persons Aged 65 and over in the United States will be obtained from the U.S. Centers for Disease Control and Prevention.

Suicide Rate Among Elderly Males in Missouri

- ♦ Definition: Suicide Rate Among Elderly Males in Missouri
- ♦ Numerator: Number of Suicides that Occur Among Men Age 65 and Older Occurring in Missouri per Year
- ♦ Denominator: Estimated Missouri Population of Men Age 65 Years and Older

Data source for numerators and denominators is the Department of Health death certificate file at the state data center and the census 2000 data and population projections from the Missouri State Census Data Center.

VIII Key Strategies

See Key Strategies identified in Objective 2A.

APPENDIX I: MISSOURI SUICIDE PREVENTION PLAN RECOMMENDATIONS

STRATEGY 1 - Awareness: Increase Awareness About the Preventability of Suicide.

In Missouri, the suicide prevention messages should be consistent between all those engaged with awareness efforts. Those messages should include information regarding:

- ✓ Risk and protective factors;
- ✓ Availability of effective treatments for mental illness and substance abuse disorders;
- ✓ The importance of screening and early interventions; and
- ✓ Acceptability of asking for help around mental health issues.

ACTIVITY 1: DEVELOP A STATEWIDE PUBLIC AWARENESS CAMPAIGN FOR THE GENERAL PUBLIC.

- Will develop public service announcements, brochures, billboards, videos, Internet Web sites, and a speaker's bureau to educate the public about suicide and its risk and protective factors in conjunction with the Departments of Health (DOH), Mental Health (DMH), Social Services (DOSS), Elementary and Secondary Education (DESE), and Corrections (DOC).

Use Community partnerships/Caring communities to distribute information to raise awareness.

Local implementation of national awareness programs, such as the "Yellow Ribbon" program and the "Life Keeper" Quilt effort.

Publish national and state suicide prevention hotline numbers.

Add links at existing Web sites that explain the risk and protective factors of suicide.

Will develop strategies to target the following groups to receive public awareness campaign materials:

- Journalist, including print and broadcast media;
- School boards, school administrators, counselors, and classroom;
- Teachers;
- Social services, health, and mental health professionals;
- Public officials, libraries, and clergy; and
- Bookstores.

Develop a resource guide both in hard copy and on the Web.

Include sessions on suicide prevention as part of conferences and trainings that address injury, violence (including domestic violence), and other health issues.

ACTIVITY 2: DEVELOP TRAINING & EDUCATION OPPORTUNITIES FOR PROFESSIONAL CAREGIVERS WHO PROVIDE SERVICES TO HIGH-RISK POPULATIONS.

Prepare educational materials for education professionals about the risk factors and techniques to assist those at risk.

Develop specific education curricula for inclusion in school systems.

Will integrate youth suicide prevention into existing adolescent health clinics and programs for pregnant and parenting teens.

Provide training and educational materials for Substance Abuse and Mental Health case managers caring for DMH consumers.

Provide training for probation and parole officers.

DMH and Caring Communities will develop a resource guide for use by professional caregivers, such as Residential Care Facility, Nursing Home, Group Home, Senior Center, and Home Health Care staff.

DOH, DMH, DESE, DOSS, and DOC will annually each include information about suicide prevention in existing public forums targeting the following groups:

- Social services, health, and mental health professionals;
- School administrators, counselors, and classroom teachers; and
- DOSS will provide training for case managers in the Divisions of Family Services (DFS), Youth Services (DYS), and Aging (DOA).

ACTIVITY 3: ENSURE THAT THE SUICIDE PREVENTION MESSAGE IS CONSISTENT ACROSS AGENCIES & THAT THE PREVENTION STRATEGIES & INFORMATION ABOUT THE RISK AND PROTECTIVE FACTORS ARE INTEGRATED INTO SUICIDE-RELATED MATERIALS OF ALL GROUPS & AGENCIES.

Monitor the development of suicide prevention messages and assure that they are guided by the state plan.

STRATEGY 2 - Intervention: Improve Access & Availability of Prevention & Intervention Services.

ACTIVITY 4: INVOLVE LOCAL COMMUNITIES & SUPPORT LOCAL EFFORTS TO PREVENT SUICIDE BY ASSESSING & ACTING ON LOCAL RISK OR PROTECTIVE FACTORS.

DMH will distribute information regarding the importance of implementing suicide prevention activities and identify partners for grassroots efforts, such as:

- Medical and pharmaceutical stakeholders;

- Faith community;
- Elderly caregivers;
- Schools;
- Jails; and
- Employers.

DMH will provide or assist in obtaining funding for prevention initiatives sponsored by local groups.

DMH will facilitate formation of survivor support groups.

ACTIVITY 5: ASSURE THAT GATEKEEPERS* UTILIZE AVAILABLE RESOURCES & ACTIVELY USE THE MECHANISMS FOR REFERRAL.

**Gatekeepers might include anyone who by virtue of their daily activities comes into contact with individuals that may be at risk for suicide and then could potentially recognize and refer for help. Examples could include teachers, clergy, employers, attorneys, letter carriers, correctional workers, home care providers, etc.*

DOH and DMH in conjunction with other departments will provide education and training to individuals annually that work in education, health (including mental health and aging), and social services.

DMH will review and recommend specific screening tools and make recommendations for its usage.

DMH will establish training opportunities annually for local Gatekeepers in conjunction with other departments.

DMH will increase public awareness of its statewide hotline.

ACTIVITY 6: INCREASE THE CAPACITY OF PROVIDER SYSTEMS TO SERVE THOSE AT RISK.

DESE will assess and revise as needed at least five professional school curricula in the assessment and management of suicide risks, including:

- Clinical social work;
- Counseling;
- Nursing, and psychology programs;
- Medical schools and residency programs; and
- Emergency Medical Technician training.

DESE will increase ratio of mental health professional to students in schools by 5% above the baseline.

DMH will develop protocols for suicide prevention in managed care systems.

DMH will develop and the promote the use of protocols for follow-up to ongoing services after suicide risk is identified in hospital, emergency care and other treatment setting.

DMH and DOSS will propose changes to Medicaid to assure access to prompt suicide prevention, mental health and substance abuse treatment services.

DMH will propose to the legislature new or expanded programs to assure that high suicide risk groups have prompt access to suicide prevention, mental health and substance abuse treatment.

STRATEGY 3 - Methodology: Assure that Suicide Prevention in Missouri is Evidence-Based & Data-Driven, Consistent with Community Values & Based in Consensus.

ACTIVITY 7: DEVELOP & MAINTAIN A SURVEILLANCE SYSTEM.

Develop an ongoing system to regularly monitor suicide occurrences in Missouri will be established under DOH leadership and in conjunction with other state agencies. This will include collecting data from existing sources as well as identifying and utilizing new reporting systems.

By state FY 2003, DOH will establish and implement avenues for the active dissemination of reports and information to all stakeholders and community members.

ACTIVITY 8: MAKE AVAILABLE BEST PRACTICES AND MODEL PREVENTION STRATEGIES & INTERVENTIONS.

All new suicide prevention initiatives shall include and be funded for program evaluation to measure the efficacy of the intervention.

DMH will assure that all Practice Guidelines developed and published under its leadership address aspects of suicide prevention applicable to the topic.

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KEY OUTCOME 3: Children with Severe or Multiple Mental Health Problems will Achieve Success Living in Their Communities

- ☐ There are approximately 6 million to 9 million children & adolescents in the United States with Serious Emotional Disturbance (SED), many of whom have co-occurring disorders, substance abuse &/or developmental disabilities along with these emotional disturbances.
- ☐ According to the National Co-morbidity Study, 41% to 65% of individuals with a lifetime substance abuse disorder also have a lifetime history of at least one mental disorder. The rates are highest in the 15 to 24 year old age group.
- ☐ It is estimated that in a 1-year period more than 700,000 children nationwide are in out-of-home placements.
- ☐ Students with SED miss more days of school per year (an average of 18 days) than do students in any other disability category.
- ☐ 48% of students with SED drop out of grades 9 through 12, as opposed to 30% of all students with disabilities and only 24% of all high school students.
- ☐ Of those students with SED who drop out of school, 73% are arrested within five years of leaving school.
- ☐ Long-term-school failure contributes to truancy, inability to work productively as adults, & a greater risk of involvement with the correctional or juvenile justice system.

Source: Chesapeake Institute of the American Institute for Research for the U.S. Department of Education Office of Special Education & Rehabilitative Services, September 1994; Mental Health: A Report of the Surgeon General (2000).

I Why This Measure is Important

Effectively serving and meeting the needs of children and youth with mental health problems (psychiatric and emotional disorders, developmental disabilities and substance abuse) and their families has become a national concern as evidenced by the Surgeon General's recent report on mental health. In one national epidemiology study it is estimated that almost 11 % of U.S. children ages 9 to 17 have a diagnosable mental or addictive disorder associated with at least significant impairment and 5% have extreme functional impairment. These children and youth often are placed in costly out of home programs; they often experience multiple placements by multiple agencies; they often are failing at school or not attending school and they are frequently involved with the juvenile justice system. There is research that when children and youth are not successfully connected to their family

(or in a home or homelike environment), connected and learning in school and connected in positive ways to their communities they are at greater risk of being unable to work productively as adults, are at greater risk of involvement with the correctional or juvenile justice system and at greater risk of long term involvement with the public mental health system.

Additionally, studies indicate that approximately 20% of these high-end youth utilize 80% of the resources (funds and bed days). These high need youth are often served in out-of-home care. It is striking however that the least amount of research regarding effectiveness of mental health services has been done on the most restrictive and heavily reimbursed treatment settings, e.g. inpatient and residential treatment centers. While there are several studies that point to youth improvement in residential care, the improvements are not sustained without strong support from and connection with the home, school, and community. Other studies indicate that, in fact, residential care can be a factor that increases risk of later incarceration in a juvenile or correctional setting.

Nationally, questions about excessive and inappropriate use of inpatient and residential placements were raised in the 1980's and clearly documented thereafter in rising admission rates from the 1980's into the mid-1990's, without evidence of increased social or clinical need for such treatment. DMH believes that some children will require hospital and residential care but no child should be required to use that level of costly restrictive care, unless it is what they need and not because other services are unavailable.

The Surgeon General's report calls for more concerted attention to the risks and benefits of hospital and residential care interventions, along with the capacity development of community-based alternative services such as case management, respite, and therapeutic foster homes. There is a growing research base that documents the effectiveness of these community-based services in enabling children and youth with severe emotional disturbances and with co-occurring disorders of developmental disabilities and substance abuse to remain in their homes, schools and communities.

Research regarding children and youth with co-occurring disorders who experience school failure is equally compelling in terms of negative outcomes during childhood and later in life. Long-term school failure contributes to truancy, inability to work productively as adults and greater risk of involvement with the correctional or juvenile justice system.

A complicating factor for children with co-occurring disorders is that they require coordination among several public service systems including schools, juvenile justice, child welfare, and general health for most successful outcomes. (See data box above.) Each of these child-serving systems has its own unique mandates and authority for protecting the well-being of children. This often results in confusion for

parents and for other departments in accessing services, as well as different atmospheres and expectations, and contradictory messages from system to system.

For services to be effective and cost efficient, they must be provided within a "System of Care" that unites all child-serving departments. The Surgeon General's report calls for action to be taken in the development of interagency systems of care which are comprehensive spectrums of mental health and other services and supports organized into a coordinated network to meet the diverse and changing needs of children with co-occurring disorders and their families. The common philosophy of child-centered, family focused and community-based permeates the entire process.

One primary goal of a System of Care is to increase clinical collaborations across settings, and to promote effective interventions by evaluating clinical strategies and outcomes. Over time, a System of Care results in: 1) service augmentation, 2) service substitution, and 3) service reconfiguration.

Access and services are *augmented*, that is there are increased numbers of children served and services offered. Restrictive services are *substituted* with community-based services to the extent that there are proportionately more community-based services relative to restrictive services. Community-based services are *reconfigured*, so that there are proportionately more services that support home-care. The 503 Project in St. Louis is an example of this type of System of Care in Missouri.

II Trend Analysis

The overall rate of out-of-home placement in Missouri's child welfare system has increased between 1992 and 1999. In 1992, the rate of entries into out-of-home placement was 4.2 per 1000 children and in 1999 the rate was 4.8 per 1000 children. This rate is not inclusive of children who are in out-of-home settings supervised by the Division of Youth Services (DYS), the Department of Mental Health (DMH) or the Juvenile/Family Court (JFC) system therefore the rate may be even greater.

At any given time during 2000, the Division of Family Services (DFS) had over 12,000 children in out-of-home placement. Children who have been victims of abuse, especially physical abuse, have been found to be at greater risk for experiencing serious emotional and behavioral problems. A conservative estimate indicates that approximately 2,000 of the 12,000 children have a serious emotional disturbance. It is felt that many of these children could benefit from an interagency approach to meeting their needs.

For fiscal year 2002, DMH in collaboration with DFS submitted a budget item for a joint treatment and permanency planning approach for children in residential placement. The budget item was to build upon the successes of the 503 Project in

St. Louis and position the state to address the provision of services in the least restrictive environment. This item was not funded.

III How Missouri Compares to Others

With regard to education, the following information was taken from the National Kids Count Data. While national data is not specific to children and youth with mental health problems, as was stated previously, 48% of students with SED drop out of grades 9 through 12.

TABLE 1

Nationwide versus Missouri Percentage of High School Dropouts
1990-1997

National & State High School Dropout Percentages		
Year	Nationwide	Missouri
1990	11 %	10%
1997	10 %	11%

Source: National Kids Count Data.

Comparing Missouri to the national statistics regarding school attendance, and dropout rates must be made with caution due to the varying state statutory requirements and methods for gathering information. Comparing Missouri's out-of-home placement rate to national statistics is not available.

IV Factors Influencing the Measure

The field of children's mental health began to shift in the 1980's from institutional to community-based interventions. This shift was due to the realization that children and families were failing to receive adequate care from the public sector, whose services were fragmented, inadequate and over-reliant on institutional care. As a result, the emphasis of service delivery has shifted to systems of care that are designed to provide culturally competent, coordinated services; community-based services; new financing arrangements in the private and public sectors; family participation in decision making about care for their children; and individualized care drawing on treatment and social supports called wraparound services. Factors that influence this measure in Missouri and nationally include, 1) having adequate service capacity to meet treatment needs, and 2) having other child-serving systems especially school and juvenile courts comfortable with and supporting the use of community-based approaches.

V What Works

The 2000 Surgeon General's Report on Mental Health called for systems of care designed to provide the appropriate level of services for all children. It is children with co-occurring disorders, particularly children who are involved in multiple service sectors, who are likely to benefit the most from organized systems. Collectively, the results of the evaluations of systems of care suggest that they are effective in achieving important system improvements, such as reducing use of residential placements, and out-of-state placements and in achieving improvements in functional behavior. A System of Care is a comprehensive array of mental health and other necessary services which are organized in a coordinated way to meet the multiple and changing needs of children, youth and their families.

The report also highlights that community-based services are proving to be the most effective interventions for children with co-occurring disorders. Of these interventions, the most convincing evidence of effectiveness is for home-based services, case management and therapeutic foster care.

Local Systems of Care Teams

When a child or youth and their family are referred to the Local System of Care Team a commitment is made for unconditional care and commitment by the participating agencies. Although this may not guarantee access to an immediate service, the Local System of Care Team will remain committed to the development of transition plan and supports until a long-term plan can be developed and the preferred services available. The Local System of Care Team, in developing and authorizing a service plan for child or youth and the family, brings the full continuum of resources available to all of the partner agencies. These may be achieved by referrals to access additional services or removal of barriers in accessing services. When agencies make a referral to the Local System of Care Team, the funding that is committed to the youth prior to the referral will remain available to the child and family. The focus should initially be on what the youth and family need that is not available, and removal of the barriers for those needed supports and services. These may be service, funding, or policy barriers.

When providing services to children and families who are under the jurisdiction of the Missouri courts, the children and their families are subject to the courts' mandates. These mandates are issued in the interest of the community, child, and the family's safety. To this end, the Local System of Care Team will work in conjunction with the juvenile officer and court system to plan services that are in the best interest of the child and family.

The strength of the Local System of Care Team is not necessarily new funding or services but is in the provision of better coordination of services. This is accomplished through collaborative planning and the identification and removal of system barriers. Plans developed through the Local System of Care Team are

individualized and specific. The referring agency and the Local System of Care Team remain actively involved in the provision and/or monitoring of services to the child or youth and the family even if the youth is referred for services outside the Team's geographic area.

Missouri has its own evidence of What Works. From January 1992 to December 1993, DMH piloted the 503 Project in St. Louis, an interagency System of Care demonstration for children and youth with SED. This System of Care project was developed by:

- Missouri Department of Elementary and Secondary Education;
- Missouri Department of Mental Health;
- Missouri Department of Social Services;
- Missouri Juvenile Courts;
- Families; and
- Consumers.

The 503 Project was evaluated to assess both the effectiveness of services and the interagency system in serving children with SED at risk of out-of-home placement. An independent evaluation reported that:

- In terms of remaining with their family, there was improvement from 57% to an average of 75% during a year;
- In terms of regular school attendance there was improvement from 81% to 88% during the year; and
- An average of 85% of the children stayed in school during the year.

Additionally:

- Children's symptoms were reduced by 50%;
- There was overall functional improvement of 15%;
- Time in residential care was reduced by 72%; and
- 97% of families were satisfied or very satisfied.

The 503 Project was estimated to cost at least 25% less than treating children with more traditional services primarily inpatient and residential care. The interagency approach to service planning and delivery, interagency sharing of resources, involvement of families and use of services such as case management, wraparound, treatment (therapeutic) foster homes and respite were the foundation of the 503 Project's success.

VI Concerns

The availability of mental health services in relation to need is of grave concern. As reported in the Surgeon General's report, 70% of children in need of treatment do

not receive mental health services and only one in five children with SED accessed mental health specialty services.

Research suggests that it is important to provide long-term services for children with co-occurring disorders through a continuum of community-based care that addresses needs and system barriers. The integration of services provided by agencies such as education, social services, health, mental health and juvenile justice is essential; each having a stake in the well being of children. However, integration of services requires systemic change, and services must be provided in a different fashion, i.e. community-based rather than reliance on out-of-home treatment. Unless such changes are made in the planning and intervention process with these children, the results will continue at great cost to the individual, family, and society.

It is critical that state child-serving departments work collaboratively to achieve effective and cost efficient outcomes. DMH has limited capacity to provide services. Therefore, in order to improve overall outcomes for children, capacity must grow. The state's ability to "bring up" additional Local Systems of Care to meet the needs of children with the most severe or complex mental health issues on a statewide basis will be hampered in the absence of additional resources.

DATA TABLE

TABLE 2

Missouri Graduation & Dropout Status of Students with Disabilities
Kindergarten - 22 Years of Age
1999-2000 School Year

Missouri Graduation & Dropout Status of All Students with Disabilities versus Students with Behavior Disorders			
Student Status	Total # of Special Education Students	Percentage of Students Graduated	Percentage of Students Dropped Out
All Special Education Students	127,225	53.09%	9.52%
Students with Behavior Disorders	9,505	24.76%	17.83%

Source: Missouri Department of Elementary & Secondary Education, Division of Special Education.

VII Description of Measure

The Child Behavior Check List will be used to measure the success of children with severe and/or multiple mental health problems living in their community served by System of Care Teams. Decreasing problem behaviors and increasing the social

functioning and school competencies of a child will be evidence of their overall success.

The Child Behavior Check List is meant to be self-explanatory for parents with reading skills as low as the fifth grade level. Parents of children served in the Eastern Region System of Care will complete the instrument. Functionality will be measured by dividing the number of children served by the Eastern Region System of Care showing improved functioning in Child Behavior Check List scores to the number of children served in Eastern Region System of Care who have two Child Behavior Check List scores over time.

Initially, this measurement will be limited to the Eastern Region because a mature System of Care, the 503 Project, is operational in this part of the state. As is noted in the proceeding Objective, System of Care Teams will be developed in the Central, Northwest, Southwest and Southeast regions. When these teams become fully operational, the same measurement will be applied to them.

KEY OBJECTIVE 3A: Increase the Percentage of Days in School for Children and Youth Served in the Eastern Region System of Care Team by 25% in FY 2003

- ❑ According to the 2000 Missouri Kids Count Data, in 1999, in St. Louis City, over 13% of students dropped out of school. The county graduation rate was 38.8%.

I Why This Measure is Important

St. Louis City's dropout rate is one of the highest in the state and likewise the county's graduation rate is one of the lowest. As was stated previously, students with co-occurring disorders miss more days of school per year than do students in any other disability category, as well as having one of the highest dropout rates.

Teens who drop out of high school will find it difficult to achieve financial success in life. The most recent data available from the Census Bureau's Survey of Income and Program Participation suggest that high school dropouts are about three times as likely to slip into poverty from one year to the next as those who have finished high school. A recent report from the U.S. Department of Education concludes, "In terms of employment, earnings, and family formation, dropouts from high school face difficulties in making the transition to the adult world".

High school dropouts make up nearly half of the heads of households receiving public assistance in Missouri, according to the 2000 Missouri Kids Count Data Report. Between 1973-1997, the average hourly wage for high school dropouts decreased 31% when adjusted for inflation. Economic prospects for dropouts will be even more gloomily as more and more jobs require advanced skills and technical knowledge.

High school dropouts are at risk for other negative outcomes like becoming a teen parent or spending time in prison. The children of dropouts are much less likely to graduate themselves, perpetuating a cycle of diminished opportunities. One-third of these children must repeat a grade. They also require special services and are suspended or expelled more frequently.

The Eastern region has developed a results-based System of Care, the 503 Project that has demonstrated the ability to improve regular school attendance of children with co-occurring disorders, served by DMH. As described in the Key Outcome for this objective, the 503 Project was designed as a community based, locally

controlled, interagency treatment program whose goal was to keep children with multiple mental health needs at home, in school and out of jail.

State agencies involved with this initiative include mental health, social services, and elementary and secondary education. The model was developed with emphasis on intensive case management and respite, as well as a focus on family choice and wraparound treatment planning. While the 503 Project is successful, the number of children currently served is limited compared to the number of children that are in need of this comprehensive approach. This is primarily due to the limited funding available to develop these resources.

II Trend Analysis

The 503 Project Performance and Evaluation Report found that 86% of the children served in the program were in school during the year.

According to the 2000 National Kids Count Report, there was a small decline in the share of 16 to 19 year olds not attending school and not working, from 10% in 1990 to 9% in 1997.

III How Missouri Compares to Others

The following table helps to illustrate how Missouri compares to other states regarding school drop out rates for children with emotional disturbances.

Comparison across states regarding measures of school functioning and attendance must be made with caution. States have different statutory mandates, rules and methods for collecting and reporting. Cross state comparisons often reflect comparison of apples and oranges unless all data elements that are reported are understood and consistently defined. This process of being able to effectively analyze data across states will be a focus for continued analysis.

TABLE 3

Dropout Status of Special Education Students with Emotional Disturbances*
Ages 14-21 & Older
1998-1999 School Year

State	Percentage of Special Education Students with Emotional Disturbances who Dropped Out of School
Arkansas	11.38%
Illinois	10.65%
Missouri	9.79%
Iowa	9.55%
Oklahoma	9.05%
Kansas	8.18%
U.S. & Outlying Areas	7.80%

Source: U.S. Department of Education, Office of Special Education Programs.

* Based on Total Number of Students Served Under IDEA

The Federal special education law, the Individuals with Disabilities Education Act (IDEA), mandates school systems to provide special education services to children and adolescents whose disabilities interfere with their education. When these disabilities take the form of serious emotional or behavioral disturbances, school systems are required to respond through assessment, counseling, behavior management and special classes or schools. Under a System of Care model, education is but one of the agencies that is working collaboratively to keep these children and youth in school, and safely residing in their homes or home-like setting. No one agency carries the sole responsibility for accomplishing this goal. The 503 Project is an example of a System of Care that is improving school outcomes for children. Increasing SOC teams will help to ensure that more children are staying in school and graduating.

IV Factors Influencing the Measure

Dropout rates vary by location, race and ethnicity according to the 2000 National Kids Count Data Report. Cooperative agreements and services between local schools and the local community mental health centers must be in effect to achieve the outcome of children remaining in school. Unfortunately, there are times when child-serving agencies are not as fully committed as need be to this common goal. In the 503 Project, the St. Louis Special School District was a regular player and was critical to achieving the 503 Project outcomes regarding school.

V What Works

The 503 Project Performance and Evaluation Report supports the System of Care model for improving school attendance for children with co-occurring disorders. This report indicates that the 503 Project was able to maintain a relatively high level of school involvement among the children served. Relatively few children attended school less than half the time, i.e. an average of less than 4% of the group during the twelve-month period. The majority of the children were in special education classes.

VI Concerns

In order to help ensure that children stay in school and graduate, it is vital that child-serving agencies work as partners towards fulfilling this goal. There must be a willingness of all interagency partners and families to commit to community-based services and to shared service development and implementation. Service capacity development must occur for this initiative to be effective for all Missouri's children.

In addition, fulfilling this goal will require the ability to adequately support parents and teachers, the cornerstone players in children's day-to-day school education and activities.

VII Description of Measure

Children and youth served in the Eastern Region System of Care will increase the percentage of days they attend school in the community. This will be measured by comparing the number of actual days that children/youth in the System of Care spend in school to the number of possible days that could be spent in school, for the year. This data will be collected by the community mental health centers and entered into a centralized database.

The Department believes that a functional system of care teams will increase the percentage of days children are in school in the Eastern Region by 25% in FY 2003.

VIII Key Strategies

- A. Expand capacity of System of Care Teams (503 Project) to entire Eastern Region.
- B. Develop cooperative agreements for System of Care Teams in the Eastern Region; agreements are to define roles and responsibilities for schools and the treating/support systems to work collaboratively to serve children and youth referred to the System of Care Team.
- C. Expand capacity for day programs for children and youth in partnership with schools in the Eastern Region.
- D. Expand capacity for case management and crisis services to be implemented within the setting where the child lives and within the schools.

- E. Develop after school mentoring and tutoring programs.
- F. Expand capacity for family supports to focus on the family supporting the child/youth in school.
- G. Prepare a FY 2003 budget decision item to support service expansion across the state.

KEY OBJECTIVE 3B: Increase the Percentage of Days that Children in State Custody & Served By the Eastern Region System of Care Live in Their Own Homes or Homelike Settings by 30% in FY 2003

Effectiveness and Outcome Research on Residential Services

- ❑ According to the Surgeon General's report, residential treatment centers are the second most restrictive form of care (next to inpatient hospitalization) for children with severe mental disorders. Although used by a relatively small percentage (8%) of treated children, nearly one-fourth of the national outlay on child mental health is spent on care in these settings. However, there is only weak evidence for their effectiveness.
- ❑ Friedman (1990) cited two studies revealing no significant benefits resulting from residential treatment when compared to alternative methods.

Source: Components of a System of Care: What does the research say? Surgeon General's Report.

I Why This Measure is Important

A number of scholarly reviews of the existing literature on the efficacy and outcomes of hospitalization and residential treatment have been completed. Burns and Friedman (1990) cited one clinical trial comparing the behavioral and educational outcomes of a group of children randomly assigned to hospitalization and community-based treatment services. Results revealed that outcomes at discharge were comparable for both groups. However, at follow-up, one half of the hospitalized group and only one-fourth of the community-based group were in institutions.

Community-based services include case management, home-based services, therapeutic foster care, and crisis services. There is mounting evidence of the benefits and effectiveness of these interventions in diverting out-of-home placement. All of these services are included in the Eastern region System of Care.

II Trend Analysis

In the last 20 years, there has been a trend within child mental health and child welfare to move the children's service system from out-of-home placement interventions to community-based services. In Missouri, DMH has held residential care capacity steady while community-based services have grown. This reflects DMH's commitment to community-based care as a first and best option for children and youth. DMH has found that residential services meet the need for a distinct,

limited number of children, but this should not be the treatment of choice for all severe need children.

The Division of Family Services had more than 2,200 children placed in residential care in FY 2000. DMH and DFS agreed that many of these children could benefit from an interagency approach to meeting their needs. For this reason, for fiscal year 2002, DMH in collaboration with DFS submitted a budget item for a joint treatment and permanency planning approach for children in residential care. This item was not funded.

III How Missouri Compares to Others

Over the last ten years, DMH has intentionally and purposefully worked to develop an integrated, community-based System of Care. This is evidenced by efforts to increase case management services, Treatment Family Homes, Families First, Consumer and Family Directed Supports, and the Community Prevention Program. While emphasis has been placed on the development of community-based services, capacity continues to lag behind the need for services. This dilemma is not unique to Missouri, but rather, is the status quo in most other states as well.

As with analysis of data regarding educational placements and progress, cross state data regarding use of out of home care must be carefully analyzed. States have different statutes, rules and methods to report data. Ongoing analysis will lead to further understanding regarding where Missouri stands in comparison with other states.

IV Factors Influencing the Measure

New funding options through Medicaid's Early Periodic Screening Diagnosis and Treatment, Intensive Targeted Case Management, and Community Psychiatric Rehabilitative Services have supported the development of more community-based service options. Despite this growth in funding, the children's mental health system continues to experience gaps in community-based services, as well as limited access to these services across the state. No one area of the state has adequate capacity for community-based services.

V What Works

The 503 Project in St. Louis has demonstrated success in preventing out-of-home placement of children and youth, and thus maintaining children in their home or homelike setting. According to the 503 Project Performance and Evaluation Report, over time, the proportion of time children spent living at home increased, reaching a peak in the fourth month, with 86% of the time spent living at home.

What is most impressive about the program is its ability to keep children in the family or within the natural system of their relatives and friends. The use of residential and institutional facilities is kept to a low level.

VI Concerns

There are many factors beyond mental health services that may impact the overall out-of-home placement rate for children and youth. Some children as a result of safety and treatment needs require out-of-home care, thus such care is the least restrictive environment for them at that given time. In order to determine the most appropriate level of care for each child, agencies and state departments must work together with the child's family. This endeavor will help to ensure that if children are placed out-of-home, it is based on clinical need, as opposed to the system lacking the capacity for available alternatives.

VII Description of Measure

There will be an increase in the percentage of days that children in state custody and served by the Eastern region System of Care live in their own homes or homelike settings. This will be measured by comparing the number of days children/youth in state custody live in their own homes or homelike settings to the number of days children/youth are in out of home settings. Providers will collect this information and it will be entered into a centralized database.

The Department believes that a functional system of care teams will increase the percentage of days children live in their own homes or homelike settings in the Eastern Region by 30% in FY 2003.

VIII Key Strategies

- A. Develop System of Care Teams throughout Eastern Region.
- B. Develop cooperative agreements for Teams defining roles and responsibilities related to developing and funding home and community-based treatment options.
- C. Expand capacity for treatment (therapeutic) family/career foster homes.
- D. Develop capacity for independent living with appropriate supports and services for older youth.
- E. Expand family supports, case management and respite care capacities.
- F. Prepare a FY 2003 budget decision item to expand service capacity across the state.

KEY OBJECTIVE 3C: Increase Access to System of Care Teams for Children & Youth Served by Multiple State Departments by Establishing 5 Additional Teams in Other Areas of the State by FY 2003

System of Care

- ❑ A System of Care is a comprehensive array of mental health and other necessary services which are organized in a coordinated way to meet the multiple and changing needs of children, youth and their families. However, a System of Care is more than an array of services, it is a philosophy about the way in which children, youth and families receive services. Partnerships at all levels between families, providers, communities, regions and the state are fundamental to an effective System of Care.

Source: Department of Mental Health's System of Care for Children, Youth & Families.

I Why This Measure is Important

Within the public mental health system, the 1980's and 1990's have seen an increased emphasis on developing interagency community-based systems of care. As noted in the Surgeon General's Report while systems of care are designed to provide the appropriate level of services for all children, it is children with co-occurring disorders involved in multiple service sectors that are likely to benefit the most.

The report goes on to state that several studies on the effectiveness of systems of care have been conducted in recent years. Although findings are encouraging, their effectiveness has not yet been demonstrated conclusively, largely because evaluation studies have not had a control group. Most evaluations indicate that systems of care reduce rates of re-institutionalization after discharge from residential settings, reduce out-of-state placements of children, and improve other individual outcomes such as number of behavior problems and satisfaction with services.

The System of Care has helped to redefine the role of families as one of partner in services. Family participation has improved the process of delivering services and their outcomes. Research has found that for children with co-occurring disorders the more the family participates in planning services, the better family members feel their children's needs are met.

II Trend Analysis

As reported previously, nationally, emphasis has shifted to the development of systems of care that are designed to provide culturally competent, coordinated services, community-based services, new financing arrangements, family participation in decision making about care for their children, and individualized care drawing on treatment and social supports called wraparound services.

III How Missouri Compares to Others

For more than ten years, DMH, its advocates, family advocates and providers have worked together to develop local systems of care. These efforts have often taken different forms but are based on the process of interagency staffing and collaboration and adhere to a common philosophy of services being child-centered, family-focused and community-based. DMH is in the process of building upon and expanding these current efforts. Missouri's evidenced-based model for System of Care, entitled the 503 Project, will be developed in the Central, Northwest, Southwest and Southeast regions. There are no national measurements of how other states are progressing in development of systems of care. DMH will continue to work with national partners to determine methods for comparison of this objective.

IV Factors Influencing the Measure

A number of factors will influence this objective including:

- Receiving the Governor's Office and Legislative support for DMH having lead responsibility for development of a System of Care for children, youth and families;
- Department directors ensuring that state child-serving Divisions recognize and utilize DMH as the lead on System of Care for children;
- Department Directors ensuring that the state child-serving Divisions share available, appropriate resources to support the System of Care services; and
- DMH receiving appropriate funding to establish a comprehensive System of Care for children who have psychiatric, developmental and substance abuse service needs.

V What Works

The multiple problems associated with co-occurring disorders in children and adolescents are best addressed with a "systems" approach in which multiple service sectors work in an organized, collaborative way. Research on the effectiveness of systems of care shows positive results for system outcomes and functional outcomes for children.

Based on the 503 Project Performance and Evaluation, the 503 System of Care has proven cost effective for treating children with multiple needs.

- Estimated cost of Alternative Treatment: \$290, 845.00

- Estimated Actual Cost of 503 Project Treatment: \$218,376.00

Even given the conservative estimates for alternative treatment costs, it appears that the 503 Project costs 25% less than the previous alternatives would have cost.

VI Concerns

One of the primary concerns is the ability of DMH to obtain the necessary funding to establish a System of Care. While DMH has already laid the foundation for a System of Care, funding will be necessary to ensure statewide capacity and access.

Another concern is the commitment of all child-serving agencies to work collaboratively. Cooperation and a common vision are vital for the success of a System of Care.

VII Description of Measure

There will be increased access to the number of System of Care Teams for children and youth served by multiple state departments. This will be measured by comparing the number of new Systems of Care Teams to the number of System of Care Teams already in existence.

The Department as set a targeted goals of establishing five additional System of Care Teams areas of the State other than the Eastern Region by FY 2003.

VIII Key Strategies

- A. Develop guidelines for development of Systems of Care to be used for statewide development.
- B. Develop and implement training and technical assistance plan for Local and State System of Care Teams.
- C. Develop an Interagency State System of Care Team to provide oversight, coordination and technical assistance to local teams.
- D. Prepare a FY 2003 budget decision item to expand service capacity for services such as case management, crisis intervention, in-school programs and supports, respite and family support.
- E. Develop interagency funding plan for System of Care.
- F. Develop statewide monitoring and evaluation plan for System of Care.

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KEY OUTCOME 4: Improved Quality of Care for Department of Mental Health Consumers in Community Residential Placement

I Why This Measure is Important

Through the continued efforts of many persons over the last 30 years, we can now say that most of the people with mental illness or developmental disabilities live in and are members of their community. The days of large numbers of persons living in large institutions, isolated from their families and from mainstream living, are long since past. The challenge of today, however, is insuring that the quality of care is effectively maintained for these mental health consumers living in the community. Within this context, it is important to recognize the heightened responsibility of a service delivery system to establish protection of individual safety and well being as a core quality of care value.

In March of this year, a State Auditor's Office report was issued which challenged our Department's current level of activity in monitoring the services contracted on the behalf of our consumers with developmental disabilities; more specifically the collection and trending of consumer injuries and medication errors. The Auditors have challenged us to do more and better data collection, data trending and data analysis. Together, we project that an increase in such activities can lead to identification of care improvement opportunities that would otherwise go undetected.

Another key issue of concern relevant to quality of care for consumers residing in the community is the availability and employment of consistent and competent caregivers. An economy that currently offers a wide range of employment opportunities other than human services work, is posing some major obstacles to fulfilling this quality of care requirement. Community providers throughout the State consistently report staff turnover rates of frightening proportions. These staff turnover problems quickly erode the best efforts of employers to keep staff trained and to insure that therapeutic consumer-staff relationships are established and maintained.

Although it would be desirable to measure quality of the consumer's life as an outcome measure, the technology to measure quality of life in a meaningful way remains elusive. As social scientists continue to explore technologies, there is currently no accepted standard for measuring quality of life. Therefore, DMH must utilize other measurable indicators that may correlate with quality of life. Examples of such measures include satisfaction or status measures relating to quality of care that may be indicative of the experience of individuals living in community residential settings.

Quality improvement and quality development technologies challenge an organization to review and revise these measures over time to reflect current challenges or improvement strategies, replacing existing measures with new ones as needed in response to a dynamic health care environment and the accountability mandates associated with specialized health care delivery.

II Trend Analysis

Quality is a complex concept with many factors influencing individual judgments about the service received, particularly in the health care sector. In addressing quality of care as a strategic planning outcome, the key features DMH proposes to track and analyze are:

- Consumer satisfaction;
- Quality of inputs (number of staff, experience of staff, and continuity of care-giving relationships between consumers/staff, average DMH dollars spent per consumer per day) (see Objective 4B); and
- Quality of outputs such as adverse outcomes that affect consumer safety and well-being (see Objective 4A).

Consumer Satisfaction

Consumer satisfaction is a well-accepted tool for measuring health care performance when used in conjunction with other performance indicators. DMH has been conducting consumer satisfaction surveys since 1998. Over time, the content and scope of the surveys have expanded to provide better and more complete information for DMH's use in identifying quality improvement targets and goals.

The method of conducting the satisfaction survey has been adapted to each of the populations served by DMH. Interviewing is the primary survey method for individuals served by the Division of Mental Retardation and Developmental Disabilities (MRDD) while consumers served by the Divisions of Comprehensive Psychiatric Services (CPS) and Alcohol and Drug Abuse (ADA) received written surveys to be returned by mail. Costs of conducting the survey and analysis have limited the dissemination of the survey. However, each year the survey has been expanded to include additional consumers.

In the next annual DMH consumer satisfaction survey scheduled for April 2002, residents of community residential facilities whose care is financially subsidized by the CPS will receive surveys that will allow analysis of this population. In addition, the MRDD process will be modified to include an identifier to allow DMH to separately sort and analyze data for individuals living in community residential settings. By developing specific survey questions and identifying those in community residential settings, DMH will establish baseline consumer satisfaction measures in 2002 for the specific consumer population included in this outcome.

Staffing

Challenges in recruitment and retention of staff in the public mental health field have increased as our nation has experienced full employment in recent years. A presentation at the Second National Summit of State Psychiatric Hospitals in March, 2001, cited the following issues related to direct care workers:

- Wages are close to the federal poverty level;
- Entry level wages are higher for 57% of competing occupations;
- 74% of competing occupations for community residential care positions are more likely to receive benefit packages;
- Competing occupations offer more advancement opportunities;
- Caregivers in mental health settings require more education and training as well as more thorough background screening and greater likelihood of disqualification than that required in other settings; and
- Caregivers have a higher incidence of injury and require a greater level of physical strength and stamina due to job performance requirements.

Similar challenges exist for psychiatry, social work, occupational therapists and other allied professions. The most acutely felt staffing challenge among the allied professions at this time is recruitment and retention of registered nurses. These issues are not unique to a specific division of DMH but are pandemic in the field of health care.

Alarmingly, the result of staff vacancies and inadequate workforce include dramatic increases in rates of overtime that result in increased burnout, reduced quality of care (less individual time with consumers, higher staff to consumer ratios), and decreased employee satisfaction and morale that further effect workforce adequacy through increased use of sick leave and other absences.

Risk of Adverse Incidents

As we face these challenges to workforce adequacy, there are risks that decreased staffing patterns and use of inexperienced staff can lead to adverse outcomes for consumers. Adverse outcomes may be the result of less available time to complete necessary functions and responsibilities and less time for supportive interaction with consumers. As staffing pressures increase, there is increased risk of injuries, self-harm, elopements, medication errors, consumer abuse/neglect, or adverse drug reactions that may go unobserved.

III How Missouri Compares to Others

Based upon contact at national meetings and review of the literature and statistics, Missouri's experience in recruiting and retaining a qualified work force is not unique. National employment figures support the widespread difficulties in recruitment and retention of qualified staff at all levels of public mental health service delivery and administration. Some at the national level have dubbed the problem "The Staffing Crisis of the 21st Century" with predictions that this will be a long-term challenge that will require significant strategic planning and action.

It is more difficult to assess comparisons of consumer satisfaction levels in Missouri in relationship to other public mental health service delivery systems. Although "report cards" for services were discussed extensively as part of the national policy debate regarding managed health care, no standards exist to assure comparability of data and there is limited access to such data for other states.

In general, when exploring the literature and data related to consumer satisfaction regarding health care, rates of satisfaction are generally high, especially in relationship to one's health care practitioner. Satisfaction rates in the health care sector also appear to be highly correlated with:

- Courteousness and responsiveness of scheduling personnel;
- Ease of access to one's health care practitioners; and
- Greater choice among practitioners.

Since choice and access in the public mental health sector are significantly different than traditional health care delivery systems, consumer satisfaction data may trend differently in this specialized segment of the health care sector.

IV Factors Influencing the Measure

As cited earlier, quality of care is a complex, multi-factorial concept that is influenced by many factors. Although DMH will focus on critical factors such as consumer satisfaction, staffing as a quality of care input, and rates of adverse events as an output, there are many additional factors that also influence quality of care.

Economic Performance and Trends

If the unemployment rate increases, there could be improved rates of recruitment and retention. However, the gains might not be proportionate to that associated with the economic improvement if DMH fails to implement recruitment and retention strategies.

Consumer Partnership in Service Delivery System Planning and Policy Formulation

The field of mental health has learned that partnerships and feedback from consumers and families is critical in shaping the service delivery system. The contributions of consumers and their families regarding quality of care and methods to manage quality is crucial to support self-determination and recovery lifestyles for those served by DMH.

Recognition and Value of Contribution

Many aspects of job satisfaction are tied to the intrinsic value of the contribution individuals feel they are making to the organization or society as a whole. The more effective efforts in public awareness can be in decreasing stigma for individuals with mental illness, developmental disabilities, and substance abuse, the more “status” that can be associated with employment in the field of mental health.

Consumers’ Level of Need and Service Demand

As resources have been constrained or limited, DMH has increasingly limited access to those individuals with the greatest service needs. Consequently, over the last decade, individuals receiving services have higher levels of symptom acuity, more behavioral issues, greater functional impairments, and often have higher incidence of physical health care needs, many of a chronic nature. The result is increasing demands and expectations as the level of risk and responsibility for these individuals grows. In association, increased standards of service delivery practices have occurred in areas such as restraint and seclusion, individualized planning, and consumer rights. At the same time, many of the individuals served by DMH also have one or more chronic health care needs such as Chronic Obstructive Pulmonary Disease (COPD), sleep apnea, Hepatitis B, HIV/AIDS, and diabetes have added to work load for staff in community residential facilities.

New Technologies

The field of mental health, like all health care, can be dramatically impacted by advances in technology that result in improved outcomes for consumers. These can include medical breakthroughs in newer seizure and psychotropic medications as well as implementation of evidence-based best practices such as supported employment, assertive community treatment, and integrated services for co-occurring mental illness and substance abuse. Although these developments have been incremental and have not yet achieved a “cure” for mental illness, developmental disorders, or substance abuse, these innovative practices hold promise for improved outcomes for consumers and can have impact on staffing patterns.

V What Works

Quality management technologies have proven to be successful in making improvements in health care environments. The use of staff at all levels of the organization to identify quality issues and utilize data-based and data-informed processes to design intervention strategies and measure the results of the intervention has been the backbone of the quality development effort. DMH will provide leadership to design a quality framework based on the following principles.

Identification of Key Indicators of Quality

Identification of a limited number of critical measures of key strategic issues that will be the focus of concerted efforts to improve quality. (Once quality management efforts have achieved the desired effect on the critical measures, additional indicators or replacement indicators will be identified.)

Decision Support

Design and implementation of an information system that can provide information about consumers and outcomes to support leadership and decision-making at all levels of the organization.

Role Definition

Clarification of roles and responsibilities of quality management based on organizational level (central, regional, and local) and organizational role (provider, payor, regulator).

Consumer Involvement

Ongoing involvement of consumers, family members, and other stakeholders in quality management efforts.

VI Concerns

There are a number of complicating issues in strategic planning and implementation related to quality of care for consumers in community residential settings. These include, but are not limited to:

- Ongoing challenge to measure quality indicators that are meaningful to consumers;
- Limited technologies for measurement of quality outcomes rather than process measures;
- Data integrity issues as reflected by reporting rates and accuracy of data;
- Early phase of development in this effort and need to establish baseline measures;
- Transition from current DMH information system to a new system over the next few years;
- Adequate resources to complete data analysis and implement strategies; and

- Health Insurance Portability and Accountability Act of 1996 (HIPAA) requirements related to managing and utilizing consumer data.

These limitations may require periodic examination of strategies to address quality of care efforts.

VII Description of Measure

Overall quality of care will be measured through a numeric rating of consumer satisfaction for consumers in community residential settings funded by CPS and MRDD. Data will be collected and analyzed on an annual basis. The rating will provide raw numbers and percentages of individuals reporting various satisfaction levels as well as average satisfaction ratings. The information can be analyzed to provide more detailed or specific information about the individuals served, as well as the entity that provides services to that individual. Specifically, reports can be generated that sort the data by the Division serving the individual as well as some key demographic data such as geographic location, age, and a limited set of other fields.

KEY OBJECTIVE 4A: Decrease Rates of Injuries & Medication Errors for Consumers in Community Residential Settings

I Why This Measure is Important

An important premise in health care delivery is that the caregiver first and foremost “do no harm” in the process of providing care. This measure is a reflection of the Department of Mental Health’s (DMH) commitment to its consumers to “do no harm” by promoting their safety. Consumer injuries and medication errors represent adverse outcomes that may be preventable and, therefore, have implications for risk management and quality improvement. Collection of data related to injuries and medication errors assists in these functions by examining types and severity of injuries and medication errors that can be instructive in the quality improvement process. Data analysis and trending activities can point to issues that may contribute to risk and severity of injuries and medication errors.

Development of a centralized and standardized automated database for consumer injuries and medication errors will represent a dramatic improvement in availability of data. The system is being designed to provide comparable data in key data fields that will help support quality improvement at the provider level and in systemic development efforts. Historically, this data has been maintained in localized systems that varied in content and analysis and were not readily available as tools in decision-making related to DMH’s service delivery systems.

Achieving this objective is dependent on obtaining credible data that will lead to system changes to better support care, as well as individual provider corrective action. No reduction target has been established, as baseline data will first need to be gathered and analyzed.

II Trend Analysis

The only statewide data currently available for trending and analyzing related to injuries and medication errors for consumers in Missouri’s public mental health system are for CPS state-operated inpatient psychiatric facilities. This data is collected and analyzed as two performance indicators in the ORYX performance measurement initiative, a mandated requirement to receive accreditation from the Joint Commission on Accreditation of Healthcare Organizations (JCAHO). The ORYX system provided a foundation for development of definitions, data fields, and trending for a system to be utilized by DMH in collecting data in community settings. It is important to note that MRDD state operated habilitation centers and regional centers collect injury and medication error data; however, it is site and/or region specific which limits statewide Trend Analysis.

Data for CPS hospitals should not be used to set baselines for injury or medication error rates in community settings because of major differences in staffing, environment, populations served, and function. However, the consistent design of the ORYX and community systems may allow analysis of the data to determine any patterns or correlations in the data of the two different sectors of the system.

Since community residential settings represent “home” for DMH consumers who are residing there, an examination of injury data for the general public may provide some context about general risk of injury and trends in injury. In 1998, there were 6,800,000 disabling injuries in the United States and 28,200 fatalities. Deaths caused by unintentional incidents in the home are on the rise. In 1999, 28,800 people were killed in the home in injury-related incidents. This represents a fatal injury every 19 minutes and a disabling injury every 5 seconds in America. The four leading fatal injury events are:

- Falls;
- Solid and liquid poisoning;
- Fires and burns; and
- Suffocation by an ingested object (choking).

Falls among individuals over the age of 65 are a major contributor to the death total for the general population and, therefore, elderly individuals represent an important target group in order to reduce injury numbers.

In review of similar data for medication errors, a seminal article published in The Lancet in 1998 provides important context. The researchers reviewed death certificates over a decade and found that accidental deaths caused by errors in use of medications climbed from 851 in 1983 to nearly 2100 in 1993. As a category, outpatient deaths increased from under 200 to just under 1500. By 1993, outpatients were 6.5 times more likely to die from medication errors than inpatients.

Even though medication errors that result in death or serious injury occur infrequently, more and more people are affected because of the extensive use of prescribed medications. In 1998, nearly 2.5 billion prescriptions were dispensed in U.S. pharmacies at an estimated cost of about \$92 billion. In addition, 3.75 billion drug administrations occurred for individuals in hospital settings. Some studies have found that hospital inpatients face an average risk of 18% for experiencing an adverse drug event and that the risk increases by 6% for each day of hospitalization. Although hospital medication error rates do not provide a sound comparison to community settings, they do provide some context for the extent of the problem of medication errors and the frequency with which they occur.

The most common factors associated with medication errors in a study by Lesar et al., were:

- Decline in renal or hepatic function requiring alteration of the drug therapy for 13.9% of the errors;
- Patient history of allergy to the same medication class for 12.1%;
- Using the wrong drug name, dosage form, or abbreviation at 11.1%;
- Incorrect dosage calculations in 11.1% of the cases; and
- Atypical or unusual and critical dosage frequency considerations in 10.8% of the errors.

The most common groups of factors associated with errors were those related to:

- Knowledge and application of knowledge regarding drug therapy (30%);
- Knowledge and use of knowledge regarding patient factors that affect drug therapy (29.2%);
- Use of calculations, decimal points, or unit and rate expression factors (17.5%); and
- Nomenclature such as incorrect drug name, dosage form or abbreviations (13.4%).

Many studies have identified inappropriate prescribing as a particularly important factor contributing to medication errors.

Patient factors also contribute to medication errors. These include patient understanding of the medication and its administration, memory, motivation to comply with the drug regime, the extent of undesired side effects associated with some medications, and the complexity of the drug regime.

Regardless of the setting in which medications are administered, research has definitively shown that the potential for medication errors increases as the average number of drugs administered increases. The nature of treatment for psychiatric disorders and use of behavioral and anti-convulsive medications for individuals served by MRDD would suggest that numbers of prescriptions for the DMH population would be higher than the general population. In addition, as the population ages and with high levels of chronic health conditions, DMH consumers would appear to be at greater risk than the general population for experiencing medication errors. The literature also consistently identifies children as being at higher risk of medication errors than adults due to the fact that medications are generally developed, tested and produced for adult usage posing greater risk when used with a pediatric population. This data suggests that strategic planning to impact medication error rates may include specialized strategies to address at-risk populations such as children, the elderly, and individuals with higher numbers of prescription medications.

III How Missouri Compares to Others

The DMH database for collection of data related to consumer injuries and medication errors for consumers living in community residential settings should be

operational by January 2002. We have been unable to find comparable data bases from other states. Until a community baseline can be established through use of the new reporting and data collection system, trends cannot be identified for community residential settings. Hypotheses may be developed from analysis of the ORYX indicators but their validity is highly questionable. Until data can be collected and normed over time, including development of risk adjustment capabilities, use of the data as a performance benchmark or to compare data across facility types is not valid and represents misinterpretation of the data. In addition, the extensive literature in the field of medication error reduction stresses that benchmarking and comparison of medication error rates across facilities or programs is not considered a “best practice” in reduction efforts. Instead it is suggested that it is best used by individual agencies to design effective strategies for rate reduction that focus on systemic issues and improvement without affixing “blame” on practitioners for the errors that do occur.

The information contained in Table 1 below provides information for Missouri residents related to non-fatal injuries and poisoning. The information was provided by the Missouri Department of Health for calendar year 1999. A periodic comparison of these rates to those generated by the DMH database for injuries should be conducted when the DMH consumer data is available. It should be DMH’s goal that DMH consumers living in community residential facilities face no greater risk of harm from injuries than the general public. DMH is attempting to obtaining data from other states to serve as a comparison.

TABLE 1
1999 Non-Fatal Injuries & Poisonings of Missouri Residents

Non-Fatal Injuries & Poisonings of Missouri Residents				
INTENTION		NUMBER OF CASES	PERCENTAGE OF CASES	RATE PER 10,000 POPULATION
ALL		690,415	100%	1,260
	Unintentional	629,436	91.1%	1,115
	Self-Inflicted	6,013	0.9%	11
	Assault	25,354	3.7%	46
	Undetermined	29,612	4.3%	53
HOSPITALIZED		55,063	8.00%	100
	Unintentional	42,925	78.00%	78
	Self-Inflicted	2,608	4.70%	5
	Assault	1,497	2.70%	3
	Undetermined	8,033	14.60%	15
EMERGENCY ROOM		635,352	92.00%	1,160
	Unintentional	586,511	92.30%	1,073
	Self-Inflicted	3,405	0.50%	6
	Assault	23,857	3.80%	44
	Undetermined	21,579	3.40%	40

Source: Missouri Department of Health.

IV Factors Influencing the Measure

Injury and medication error rates and outcomes are reflective of a number of factors that include but are not limited to:

- Environmental conditions and physical plant maintenance;
- Age, physical limitations or disabilities of the resident population;
- General health status of consumers served;
- Other risk factors for the resident population (diagnosis, smoking, etc.);
- Staffing patterns and protective oversight;
- Staff skills and competencies;
- Staff training and knowledge;
- Consumer education and ability to communicate;
- Policies and procedures of community residential provider agencies;
- Compliance with DMH and Division of Aging regulations and standards;
- Pharmacy and medication practices of the program;
- Post-injury response by staff; and
- Staff skill in identifying and responding to adverse medication reactions.

V What Works

Interventions designed to reduce injury rates will vary based on what is learned from the data analysis and trending information. General literature related to minimizing risk for injury include the following:

- Modify the environment to minimize risk of falls such as, but not limited to, installing grab bars, moving furniture, and minimizing use of area rugs or other obstacles;
- Install smoke detectors and fire extinguishers;
- Check batteries for smoke detectors and develop fire rescue plans;
- Eliminate potential hazards such as lead-based paint, radon and carbon monoxide;
- Teach Cardiopulmonary Resuscitation, the Heimlich maneuver, and first aid techniques to give assistance if injury does occur;
- Enforce strict safety belt policies to require all consumers to buckle up in agency-operated vehicles;
- Implement security and safety plans that can prevent workplace violence;
- Educate consumers and employees regarding safety precautions and procedures;
- Implement quality improvement processes for high risk and high volume activities that have associated risks of injury; and
- Identify individuals who may be at high risk and address issues through individual planning and supports.

Interventions designed to reduce medication error rates will also be shaped by the results of data analysis and trending. However, the literature agrees that reducing the error rate significantly will require multiple interventions. Methods that have proven successful in reducing medication errors include the following:

- Improved error reporting and data collection to support quality improvement efforts;
- Automated information and decision support systems for management of information related to medications;
- Consumer education and involvement in decision-making regarding medication decisions;
- Unit dosing systems for administration of medications;
- Interventions that promote standardization in practice and utilize safeguards to minimize risks associated with medication errors;
- Improving teamwork and communications among physicians, pharmacists, nurses, direct care staff, case managers and consumers;
- Improved Training and education;
- Collaboration with drug manufacturers (to address labeling problems, inadequate or obscured warnings, and brand names of drugs for different purposes that sound alike);
- Recognizing medication errors as a systems problem;

- Quality assurance systems;
- Patient identification procedures and systems;
- Patient education and procedures to assess usage of herbal supplements in conjunction with medication; and
- Promoting adequate staff to assure that adequate time and attention are given to the medication prescription, dispensing, and administration processes.

VI Concerns

Although injuries are adverse events that DMH wants to minimize, injury rates will most likely be found to be a low frequency event in our system with fairly stable patterns. Therefore efforts to address it are likely to result in small gains to the system. As in most preventive activities, particularly those with stable rates that are relatively infrequent, demonstration of effectiveness of interventions is a challenge.

Medication errors are likely to follow a significantly different pattern than injuries as demonstrated by scores of studies of the problem. Because medication prescription, dispensing, and administration are high volume activities for providers working with Department consumers and because many DMH consumers have higher numbers of prescribed medications, the numbers and rates of medication errors are likely to be greater than for the general population. In addition, literature suggests high rates of medication errors in hospitals and nursing homes with staff that are highly trained and well-developed systems for medication administration. Therefore, one might hypothesize a higher rate of medication errors in community residential settings that are less regulated and have staff who are not trained as health care professionals. The literature also stresses that medication error rates in all settings are undoubtedly lower than actual incidence because many errors may be undocumented or unreported.

For these reasons, the conversion of raw data to rates with a common denominator will allow better comparability of injury rates and medication error rates. In addition, DMH must work to develop methods to “risk adjust” the data to reflect high risk factors associated with the population of residents. If this is not done and providers are concerned that they risk higher rates of injury or medication errors by accepting consumers with complex health care needs or challenging behaviors, the result can be disincentives by providers to accept DMH consumers or those with higher risk profiles.

With implementation of additional reporting requirements, development of a baseline will require time and experience. In order to implement the new system, DMH will be conducting training regarding the new data forms and reporting requirement to increase awareness and compliance. As a result, the rate of reporting is likely to increase dramatically in initial implementation. Consequently, interpretation of the data must be done with the understanding that what may appear to be increased frequency of the events themselves may instead represent improved reporting.

In addition, reporting and data entry issues for new systems will follow a learning curve. In order to assure the integrity of the data during initial implementation and thereafter, a plan for data integrity will need to be developed to manage the quality of the data entered into the database.

Transition from an interim database to the new DMH Customer Information Management, Outcomes and Reporting (CIMOR) system will result in some data continuity issues but will in the long run yield the best data and decision support capabilities.

VII Description of Measure

The measures to be used for this objective will be the rates of injury and the rates of medication errors in community residential settings. The injury rate will be expressed as the ratio of the number of CPS and MRDD consumer injuries occurring in community residential settings requiring medical intervention, hospitalization or resulting in the death of a consumer divided by the community placement bed days purchased by DMH during the time period. The measure will also be calculated for specific categories of injuries (accidents, self injury, other-inflicted, unknown) and may be calculated for specific divisions or program settings for more robust data analysis. For the medication error rate, it will be calculated as the ratio of the number of CPS and MRDD consumer injuries occurring in community residential settings divided by the community bed days purchased by DMH during the time period. As with injury rates, data analysis can include various sorts of the data to get more specific information by type of setting and population served.

No reduction target has been established, as baseline data will first need to be gathered and analyzed.

VIII Key Strategies

- A. Monitor performance of the provider of services.
- B. Provide follow-up, technical assistance, and training when performance issues are identified.
- C. Conduct appropriate investigation of incidents that may have been the result of abuse or neglect.
- D. Recognize efforts that accomplish reductions in injury and medication error rates.
- E. Develop survey technologies that identify trends and themes that are critical to consumer safety and well-being.
- F. Involve consumers in the survey and feedback process by interviewing consumers and families about outcomes that are meaningful to them.
- G. Establish ongoing communication and support of each Division's regional offices to assure consistency.
- H. Develop standards that require and support quality management efforts at the provider level.

Specific strategies for addressing these issues will be designed as action plan steps to guide DMH implementation of this effort. It should be noted that DMH's roles as purchaser and regulator needs to be coordinated and consistent to effectively accomplish these reductions. DMH's surveyors and case managers will need to be skilled at arranging for or providing appropriate technical assistance that consistently promotes sound quality management principles.

Strategic efforts will require careful consideration of resource allocation and budget implications. This effort relies on capacities and development associated with DMH's CIMOR initiative to develop a new department-wide information system that will require significant new resources in FY 2003. At this time no additional dollars beyond those requests associated with CIMOR funding are planned. (Without funding for the CIMOR effort, our ability to achieve this could be compromised).

KEY OBJECTIVE 4B: Reduce Staff Turnover in Community Residential Facilities

I Why This Measure is Important

The primary resource in delivery of mental health care is its workforce. Whether we are supporting individuals with developmental disabilities or providing specific services to individuals requiring psychiatric supports the human service worker is the core element in the continual development of rehabilitation, self-determination, recovery and personal independence. These interventions are relationship-based and rely on respectful and knowledgeable interactions that provide motivation and hope for consumers. Studies have shown that a primary contributor to positive long-term outcomes for consumers are highly trained staff who have knowledge of a consumers' needs and has developed a positive relationships in their lives.

In addition, general health care concerns, often chronic in nature, must be addressed for individuals in community residential settings. These include issues such as but not limited to diabetes, chronic obstructive pulmonary disease, high blood pressure, and other chronic conditions. Recent studies have demonstrated that individuals with serious mental illness have significantly reduced life expectancy.

In the field of developmental disabilities and among the mentally ill and persons with substance abuse disorders we are dramatically increasing the inclusion of individuals into our communities. This rise in community and family based services and supports has increased the need for highly trained direct support workers that can handle the medical, behavioral, and social needs of our consumers. Conversely, anecdotal information from providers across the State, and certainly supported by the trends seen in our state-run facilities, see annual turnover rates among direct care workers of 50% and higher as common.

Staff turnover provides a useful measure of the ability to maintain an experienced workforce that not only is trained and competent in health and mental health related matters but also contributes to the continuity and quality of care for consumers. The positive outcome for consumers from turnover reduction would be that staff would remain in their positions for longer periods of time. Knowledge about individuals living in residential settings and stable relationships are critical indicators of systemic stability and infrastructure.

In FY 2000, CPS served 5,698 individuals in supervised residential settings across the state, many of whom lived in residential care facilities. For the same period, MRDD served 5,483 people requiring a variety of direct and indirect supports. Individuals served by MRDD were consumers who live in the community and require various amounts of paid direct care support. As we face the challenges of meeting

the highly individualized and comprehensive needs of these consumers, the demand for a highly trained, competent workforce with low turnover rates will specifically affect the lives of these citizens.

II Trend Analysis

Challenges in recruitment and retention of staff in adult caregiver positions have reached crisis proportions in recent years. National trends have shown this problem is affecting the service support system through the United States. Although it is not unique to the field of mental health, it has devastating implications due to the vulnerable nature of the consumers served in community residential facilities. Specific trends that define this crisis include:

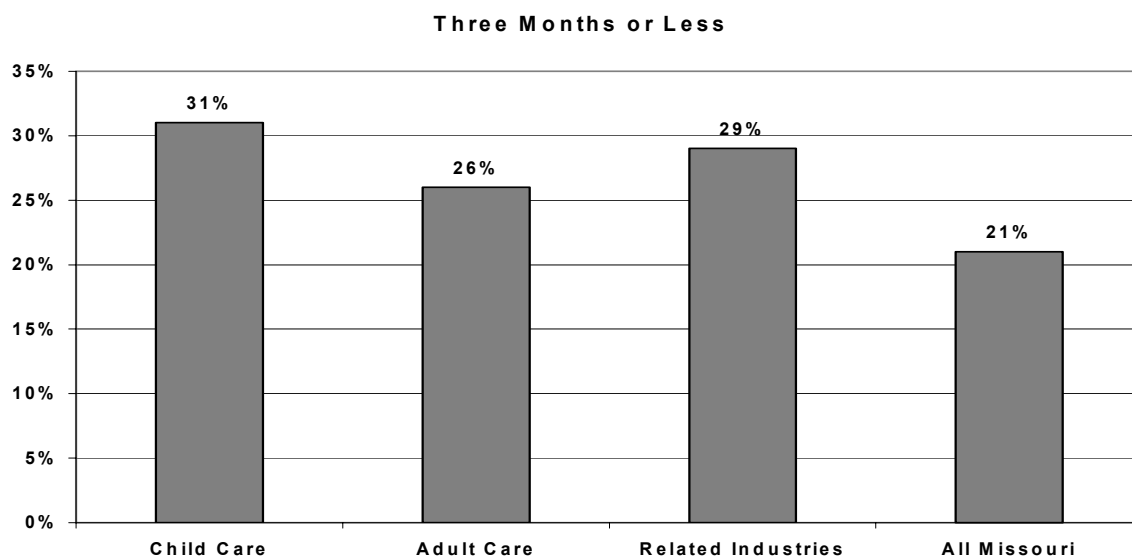
- ☐ Nationally the Bureau of Labor Statistics (Leftwich, 1994) estimates that by the year 2005 the number of:
 - Home health aides needed will increase by 138% to 827,000;
 - Human service workers needed will increase 136% to 445,000; and;
 - Personal and home care aides needed will increase 130% to 293,000.
- ☐ The proportion of staff that historically make up direct support workforce (men and women between 18 to 44) is projected to drop from 42% to 37% between 1995 to 2005, and it will continue to drop even beyond 2005 (U.S. Bureau of the Census, 1996).
- ☐ Twenty-two percent (22%) of direct care worker families are living at or below poverty, nearly three times the rate for all workers. Adult caregivers in Missouri earn 20% less than the average Missourian, despite working more hours (University of Missouri, Dept. of Economics).
- ☐ Direct care aides make \$6.97 per hour compared to related industry rates of \$9.24 and a Missouri average of \$7.97. There are approximately 305,000 paid full-time equivalent direct support positions in institutional and community residential settings for people with developmental disabilities in the United States. Nationally, in 1992 direct support workers earned an average wage of \$5.97 per hour in private residential settings and \$8.56 in public residential settings. (Braddock and Mitchell, 1992). Even though there is a national commitment to keeping people in the community, unequal pay practices do not support this effort.
- ☐ Direct care positions are viewed as less attractive and desirable in terms of functions and conditions, a situation made worse by lower rates of compensation.
- ☐ Caregiver industry growth rate is projected to be one of the highest growth rates in Missouri with projected increases of 4.48% between 1996 and 2006. For every 10 newly created jobs in the United States, 8 are projected to be service oriented.
- ☐ The aging of our society is going to change the human support workforce in the future. In 1990 there were 41 million people 60 and older in the U.S. By 2006 people 60 and over will make up the largest component of the population. By

2030 the population of persons 60 and older is expected to increase to almost 90 million. The demands this population will put on the support system in the areas of daily support and health care will further erode the potential pool of support workers needed for person with disabilities and psychiatric needs.

- ❑ Nationally, the cost to replace staff who turnover in the direct support field is as high as \$206 million dollars (Larson & Lakin, 1992).

Figures 1 and 2 below compare 3-month and 2-year tenures among care industry workers. Figure 1 illustrates that 26% of adult care workers have been in their position for less than three months while the rate for all Missourians is 21%. Figure 2 shows that 36% of adult care workers have been in their position for more than two years compared to a rate of 48% for all Missourians.

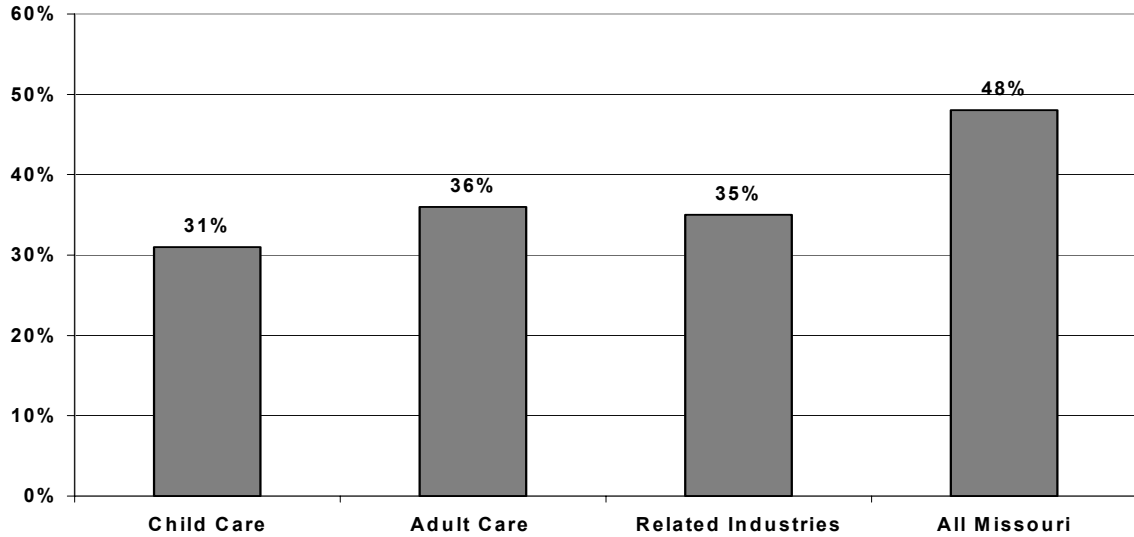
FIGURE 1
Length of Tenure in the Care Industry for Missouri Employees



Source: University of Missouri, Department of Economics, Interim Report: An Analysis of Workforce Turnover & Related Issues for the Caregiver Industries. Mueser, P., Troske, K., June 9, 2000.

FIGURE 2
Length of Tenure in the Care Industry for Missouri Employees

Two Years or More



Source: University of Missouri, Department of Economics, Interim Report: An Analysis of Workforce Turnover & Related Issues for the Caregiver Industries. Mueser, P., Troske, K., June 9, 2000.

III How Missouri Compares to Others

Missouri's experience is not unlike that of many other states and other industries that struggle to maintain an adequate workforce. Some geographic areas may face greater challenges than others due to unique circumstances such as:

- A large employer that is stable despite periods of economic downturns;
- Areas that are experiencing population loss; or
- A population aging into retirement.

TABLE 2
National Wage & Benefit Comparison for Providers of MRDD Services

State	Starting Hourly Wage
HIGHER-END WAGES	
Connecticut	\$13.83
California	\$13.00
Michigan	\$12.50
BORDERING STATES	
Iowa	\$10.96
Kansas	\$9.24
Illinois	\$8.15
Nebraska	\$8.10
Tennessee	\$7.17
Arkansas	\$6.68
Kentucky	\$6.28
MISSOURI	\$7.52 (Projected FY 02: \$8.25 for MRDD)

Source: College of Education & Human Development,
University of Minnesota, May 1999.

IV Factors Influencing the Measure

Reduction in staff turnover is a complex strategic challenge. Many factors influence staff retention in community residential facilities including but not limited to:

Economic Performance and Trends

The unemployment rate is affected by general economic performance. The rate not only affects the volume of potential candidates but increases the costs for recruiting individuals. Competition with other sectors of the economy is a challenge when these sectors may be able to offer better wages and competitive benefit packages as well as career advancement.

Greater Risk for Employees

Individuals considering employment in community residential facilities may choose other alternatives that:

- Have less risk in terms of responsibility for behavioral or health interventions;
- Require less training and commitment; or
- Are less likely to entail overtime or “holdovers”.

Particularly in settings where there is little on-site supervision available, potential employees may be uncomfortable with the level of responsibility. Competency

requirements by CPS and MRDD can be a daunting responsibility for agencies and human support workers, particularly when individual practice and response may be reviewed as part of Department investigations of abuse or neglect.

Rates

During a time when cost of service delivery has increased steadily, DMH rates paid for community residential services have remained flat with little increase over the last decade. While the private market has seen significant rate increases and the personal care add-on to Residential Care Facilities has resulted in economic benefit for non-DMH consumers, DMH rates have lagged far behind due to level funding.

Independent Housing Alternatives to Residential Care Facilities (RCF)

Consumer input regarding development of housing alternatives stresses the need for more individualized community options for more individuals. Although DMH has invested considerable resources in community based housing, staff shortages have presented a significant obstacle to the expansion of new residential opportunities. Experience has demonstrated that this commitment has resulted in an improved quality of life for consumers. However, the demand for community based residential services has greatly exceeded available resources.

The Americans with Disabilities Act and the Olmstead Decision

The implications of the Olmstead decision are potentially far-reaching in relationship to community residential alternatives. Pressures from state-operated inpatient units to move individuals into the community is already a challenge and is likely to grow as Olmstead compliance plans are implemented. The interpretation that some community settings may also be considered “institutions”, thereby accruing Olmstead applicability to their residents is an issue that may affect patterns of use of these settings. Such an interpretation also affects the degree of sophistication and training necessary for staff in these settings. In addition, efforts by Olmstead stakeholders to increase pay rates for direct care staff will affect recruitment and retention of direct support workers.

Recruitment

Currently the unification of recruitment efforts between the public and private sectors of the service and support industry exist in a few isolated pockets. If we are to be successful in recruitment in the future competitive market, we will need to unify our recruitment efforts with all sectors of the service and support community. This will include the support industry outside of mental health.

Utilizing Generation Change Within the Workforce

The dynamics of the generation “X” has made it clear that mobility is a strong factor in job success in the future years. How we embrace, use, and train to this mobile society will be a strong component to our future workforce. The development of master worker programs, as outlined by the National Skills Standards is one vehicle that can make this possible. Keeping people in our field, no matter where they live has to be a primary goal for longevity.

Training Coordination

In order to meet the training needs of human support workers, better utilize training dollars and provide more consistent competency based training, DMH needs to coordinate training between state and community providers. Recent studies have shown that overlap and inconsistency exist throughout the service support system. We could make changes in this situation through improved coordination of our training efforts.

Pacing of Future Development

A process common among private sector industries is development pacing. It is important that we evaluate the employment demographics before we develop living sites in the future. In the future it will be important that we evaluate the employee demographics before we move into placement options. This will be a sensitive match when our primary objective is to match people with the geographical locations of their choice. However, even the best match will not be successful if we cannot find an employee base.

V What Works

It is clear from the literature that improvements in levels of earnings will reduce turnover. Increased pay alone will have limited effectiveness unless other changes also occur such as perceived status, greater levels of skills and job training, and improving work conditions and environment.

If DMH is to influence turnover rates, it will be critical to address increases in direct care wages and to pair that with efforts to improve benefits, increase training, and provide career advancement opportunities. The most effective strategies must consider DMH’s multiple roles in relationship to direct support workers and the appropriate strategic tools must be applied for each role. Unless the larger system context is considered, the benefit of the strategy may accrue to only one segment of the system and may only result in increased competition within Department-funded operations.

VI Concerns

There are several issues that could complicate implementation. These include, but are not limited to:

- Establishing baseline measures that reflect only the part of the industry with which DMH contracts;
- Recognition of the greater impact of general economic conditions and performance;
- Consideration of the inter-relationship of public and private sectors of the public mental health system;
- Difficulty in assuring that base rate increases will directly result in increases in wages when other competing costs of providing the service are increasing as well (i.e., food, transportation, rent, utilities); and
- Limited control that DMH has in relationship to employer decisions regarding personnel management.

VII Description of Measure

At a minimum we will use the measure of community residential placement provider employee terminations and resignations as reported by providers. Will also complete a literature search of measurement instruments that currently exist in DMH field to identify other measures. These instruments will be evaluated for validity and reliability. By using nationally recognized instruments, we can defend data collected and norm Missouri information against national trends.

No reduction target has been established as baseline data will need to be established.

VIII Key Strategies

- A. Prepare a FY 2003 budget decision item requesting an increase in base rates that will result in improved earnings for direct care staff and benefits for direct care staff.
- B. Coordinate training for direct support staff in order to maximize staff development opportunities and better utilize funds available to private and public providers.
- C. Promote career development opportunities across the system, not just within agencies.
- D. Explore development of performance-based rates that reflect quality of products and outcomes for consumers.
- E. Explore differential salary rates that would reward persons for working persistently difficult-to-staff shifts.
- F. Develop new models that increase recognition and support of workers by management and the public.

- G. Increase the levels of skills and job training for direct care workers.
- H. Improve work conditions and environment.
- I. Define accepted standards of practice for staffing levels and patterns that afford quality care and accommodate margins for absenteeism, staff vacancies, vacation, and training.
- J. Promote sound supervision and training support for entry level positions through regulation.
- K. Develop strategies for technical assistance and support for agencies to develop competencies in strengths-based, habilitative and rehabilitative programming.
- L. Through coordinated training efforts provide training that can be accessed by community providers at low-cost that promotes effective service delivery.
- M. Explore efforts to recognize and support the work of family, friends and other unpaid, informal caregivers.

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ADDITIONAL KEY PROGRAM/PROCESS IMPROVEMENT PLANS

Consumer Issue Resolution Process

The Department of Mental Health (DMH) is seeking to streamline and improve the process by which consumers seek resolution for issues that arise in the context of the services they receive. This process affords successive levels of appeal if resolution is not achieved at the primary level of service. Consumers, family members, advocates and service providers have been involved in providing improvement recommendations to DMH. A new process has been drafted and is being commented on by key stakeholders. Anticipate considerable effort to gain full implementation statewide.

Service Utilization Review Process - MRDD Eastern District

A Management Advisory Team (MAT) has been assembled to address concerns arising from a demand for services in the Eastern District that greatly exceeds the annual appropriation of resources. The anticipated product from this review is a proposal for an effective Utilization Review Process that can be implemented statewide. Activities to date include development of a financial feedback process for key managers and development of local committees to review budgets to determine if individual budget requests are supported by identified outcomes in personal plans and to make suggestions for use of community or natural supports in lieu of state funded services.

Missouri Results Initiative - Provider Payment System - MRDD Eastern District

A Governor's Performance Group is working with MRDD and our providers in St. Louis on improving the provider payment mechanisms. Historically there have been significant delays in processing and paying MRDD providers in the Eastern District. Activities will include: flow charting current payment process and key business transactions necessary to make payments, identifying major barriers in the payment process, and identifying tools or methods that can be used by Eastern District staff to measure future performance. The anticipated outcome is adoption of procedures and policy changes necessary to improve process cycle time for provider payments, and thus protect continuity of consumer services.

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APPENDIX A: Other Sources of Information on Key Outcomes

OUTCOME 1

Harvard School of Public Health College Alcohol Study

www.hsph.harvard.edu/cas/alcohol

Higher Education Center for Alcohol & Other Drug Prevention, US Department of Education

www.edc.org/hec/socialnorms

National Center on Addictions & Substance Abuse at Columbia University

www.casacolumbia.org

† The National Survey of American Attitudes on Substance Abuse VI: Teens

National Highway Traffic Safety Administration, US Department of Transportation

www.nhtsa.dot.gov

† Impaired Driving (Alcohol & Drugs)

www.nhtsa.dot.gov/people/injury

† National Survey of Drinking and Drivers' Attitudes and Behavior 1996

† Traffic Safety Facts 1999

† Underage Drinking

www.nhtsa.dot.gov/people/injury/alcohol/index.html

Age at First Drink and Risk for Alcoholism: A non Causal Association. Prescott C.A., Kendler, K.S. *Alcoholism Clinical and Experimental Research* 1999; 23(1) 101-107.

Binge Drinking: Should We Attack The Name Or The Problem? Dr. Wechsler's Op-ed on "Binge Drinking" Definition. *The Chronicle of Higher Education* October 20, 2000.

College Binge Drinking in the 1990s: A Continuing Problem - Results of the Harvard School of Public Health 1999 College Alcohol Study. Wechsler H, Lee J, Kuo M, Lee H. *Journal of American College Health* March 2000; 48 (10): 199-210.

College Students Define Binge Drinking and Estimate It's Prevalence: Results of a National Survey. Wechsler H, Kuo M. *Journal of American College Health* September 2000; Vol. 49, No. 2, pp. 57-64.

The Massachusetts Saving Lives Program: Six Cities Shift the Focus from Drunk Driving to Speeding, Reckless Driving and Failure to Wear Safety Belts. Hingson R., Howland J., Schiavone T., Damia M. *Journal of Traffic Medicine* 1990: 123-132.

The Monitoring the Future National Survey Results on Adolescent Drug Use: Overview of Key Findings, 2000. Johnston, L.D., O'Malley, P.M., & Bachman, J.G. (2001). (NIH Publication No. 01-4923). Bethesda, MD: National Institute on Drug Abuse, c. 56 pp.

Resiliency: Relevance to Health Promotion Detailed Analysis. Submitted to: Office of Alcohol, Drugs and Dependency Issues by Colin Mangham, Ph.D., Patrick McGrath, Ph.D., Graham Reid, Ph.D., Miriam Stewart, Ph. D. Atlantic Health Promotion Research Center, Dalhousie University

www.hc-sc.gc.ca/hppb/alcohol-otherdrugs/pube/resilncy/analysis.htm#table2

Status Report on Missouri's Alcohol and Drug Abuse Problems, Seventh Edition-January 2001.

Substance Use, Delinquent Behavior, and Risk and Protective Factors Among Students in the State of Missouri: 2000. Prepared for Missouri Department of Mental Health, Division of Alcohol and Drug Abuse, February 2001.

Underage College Drinkers Have Easy Access To Alcohol, Pay Less, and Consume More per Occasion than Older Students. Wechsler H, Kuo M, Lee H, Dowdall G. *Journal of Preventive Medicine* July 2000; Vol. 19, No. 1, pp. 24-29.

University of Missouri Wellness Resource Center

Kim Dude, Director

34 Brady Commons

Columbia MO. 65211

573-882-4634

<http://web.missouri.edu/~wrcwww/>

dudek@missouri.edu

OUTCOME 2

Children's Safety Network, National Injury and Violence Prevention Resource Center
"Youth Suicide Prevention Plans."

www.edc.org/HHD/csn

Missouri Suicide Prevention Plan - A Collaborative Effort (in draft)

Office of the Surgeon General, US Department of Health & Human Services
www.surgeongeneral.gov

- † Mental Health: A Report of the Surgeon General
www.surgeongeneral.gov/library/mentalhealth
- † The Surgeon General's Call to Action to Prevent Suicide July 1999
www.surgeongeneral.gov/library/calltoaction

OUTCOME 3

Annie E. Casey Foundation
www.aecf.org

- † Kids Count Missouri Data 2000
www.oseda.missouri.edu/kidscount
- † Kids Count National Data 2000
www.aecf.org/kidscount

Missouri Department of Elementary & Secondary Education
www.dese.state.mo.us

Missouri Department of Mental Health
www.modmh.state.mo.us

- † 503 Project Performance and Evaluation Report - March 1994
- † Division of Comprehensive Psychiatric Services Comprehensive Mental Health Plan for Children and Families, 1999

Missouri Department of Social Services, Division of Family Services
www.dss.state.mo.us

Missouri Juvenile Courts
www.osca.state.mo.us

Office of the Surgeon General, US Department of Health & Human Services
www.surgeongeneral.gov

- † Mental Health: A Report of the Surgeon General
www.surgeongeneral.gov/library/mentalhealth
- † Report of the Surgeon General's Conference on Children's Mental Health: A National Action Agenda
www.surgeongeneral.gov/cmh/childreport

Components of a System of Care, What Does The Research Say? Rivera, V.R. & Kutash, K. (1994). Tampa, FL: University of South Florida, Florida Mental Health Institute, Research and Training Center for Children's Mental Health.

The 11th Annual Research Conference Proceedings, A System of Care for Children's Mental Health: Expanding the Research Base (March 8 to March 11, 1998). Willis, J., Liberton, C., Kutash, K. & Friedman, R.M. (Eds.), (1999). Tampa, FL: University of South Florida, The Louis de la Parte Florida Mental Health Institute, Research and Training Center for Children's Mental Health.

OUTCOME 4

Agency for Health Care Research & Quality, US Department of Health & Human Services

www.ahrq.gov

Bazelon Center for Mental Health Law

www.bazelon.org

Institute for Safe Medication Practices

www.ismp.org

Joint Commission on Accreditation of Healthcare Organizations

www.jcaho.org

† ORYX/Performance Measurement

www.jcaho.org/oryx_frm.html

MEDERRORLAW.COM

www.mederrorlaw.com

Medscape Today

www.medscape.com

Missouri Works!

www.works.state.mo.us

National Alliance for the Mentally Ill

www.nami.org

National Association of State Mental Health Program Directors
www.nasmhpd.org

- † National Technical Assistance Center for State Mental Health Planning
www.nasmhpd.org/ntac
- † Research Institute
www.rdmcc.org/nri
- † Performance Measures
www.rdmcc.org/nri/firstpage

National Institute of Mental Health
www.nimh.nih.gov

National Mental Health Association
www.nmha.org

National Safety Council
www.nsc.org/nsm/home.htm

Occupational Safety & Health Administration, US Department of Labor
www.osha.gov

Office of the Surgeon General, US Department of Health & Human Services
www.surgeongeneral.gov

- † Mental Health: A Report of the Surgeon General
www.surgeongeneral.gov/library/mentalhealth

Substance Abuse & Mental Health Services Administration
www.samhsa.gov

US Census Bureau, US Department of Commerce
www.census.gov

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APPENDIX B: Overview of Core Programs & Services

DIVISION OF ALCOHOL AND DRUG ABUSE

ADA provides substance abuse services through a network of contractors that operate prevention programs and treatment centers throughout the state.

Detoxification

Substance abuse treatment often begins with detoxification, in which an individual is assisted in withdrawing from alcohol or other drugs in a safe, supportive environment. Options include social setting detoxification, modified medical detoxification, and medical detoxification.

Residential Rehabilitation

In a residential treatment program, a person receives round-the-clock care, seven days a week. Rehabilitation includes assessment, individual and group counseling, family counseling, participation in self-help groups, and other supportive interventions.

Outpatient Rehabilitation

Outpatient programs and services are designed for persons whose substance abuse is less severe or chronic and who do not require residential settings for treatment. They are also designed for persons who have graduated from residential programs and need follow-up counseling and support.

CSTAR Program

CSTAR (Comprehensive Substance Treatment and Rehabilitation) focuses on serving people in their communities with individual and group counseling, skill building, family therapy, education, case management, and, where necessary, supportive housing.

- Women's Treatment Programs
- Adolescent Treatment Programs
- General Population Programs

CSTAR Alt-Care Program

The CSTAR Alt-Care Program is specially designed for female offenders being released from correctional institutions and those under probationary supervision. A joint effort through the Missouri Department of Corrections and ADA, this program offers outpatient substance abuse counseling and other CSTAR services to women

and their children while facilitating reintegration into the family and community. Alt-Care Programs are located in Kansas City and St. Louis.

Opioid Treatment Program (OTP)

The Opioid (methadone) Treatment Program (OTP) is designed for medically supervised withdrawal from heroin and other opiate drugs, followed by ongoing treatment and rehabilitation for addiction and related life problems. Missouri's OTP meets federal guidelines for such programs.

Compulsive Gambling

ADA provides outpatient treatment services to compulsive gamblers and their families throughout Missouri. Funding comes from casino admission fees. ADA also certifies compulsive gambling counselors.

Substance Abuse Traffic Offenders Program (SATOP)

ADA certifies programs to provide services to adults and minors who have had alcohol- or drug-related traffic offenses. The Substance Abuse Traffic Offenders Program (SATOP) serves more than 32,000 DWI offenders annually who are referred as a result of an administrative suspension or revocation of their drivers' licenses, court order, condition of probation, or plea bargain.

Oxford House

Oxford House is a network of self-run, self-supported recovery houses. Each house is chartered by Oxford House, Inc. To be considered for a charter, each house abides by three basic rules: 1) The house evicts anyone who relapses, 2) the house is financially self-sufficient, and 3) the house is democratically run by the residents. ADA fosters Oxford House development throughout the state.

Prevention

Preventing substance abuse not only prevents the tragic consequences of addiction but also allows for better use of the limited resources available to ADA. Therefore, ADA strives to reduce the number of persons needing treatment through an extensive prevention effort.

- Regional Support Centers

Through these centers, ADA disseminates educational materials from state and federal sources and assists with local program development. Support center staff provides technical assistance, workshops, and training based on each community's needs. The major goal of the centers is to help Missouri communities reduce deaths and injuries related to substance abuse.

- Missouri's Community 2000 Teams

Since 1987, ADA has trained more than 160 teams in substance abuse prevention measures. These C2000 teams serve as examples to other communities for local programming. The members of the Community 2000 teams are committed to promoting lifetime prevention efforts.

- **Community-based Prevention**

Through a network of community-based providers, ADA offers evidence-based primary prevention services in schools and communities. Primary prevention is designed to reduce the number of youth who start using alcohol and other drugs; reduce the factors that place individuals, families, and communities at risk for substance abuse; and lower the overall rate of substance use and abuse.

Synar Project (Tobacco Education)

Missouri retail outlets that sell tobacco are offered education and training to increase their awareness of tobacco regulations and help them develop and maintain policies and procedures that support responsible practices regarding youths. This activity includes routine mailing of educational material and notices regarding tobacco issues and visits by representatives of ADA, Division staff, and youth participants.

Additional Services

- Certification of SATOP, Prevention, and Institution-based Correctional Programs
- Contract Compliance Audits
- Technical Assistance and Training
- Public Education
- Research and Evaluation

DIVISION OF COMPREHENSIVE PSYCHIATRIC SERVICES

Forensic Services

Forensic services provides evaluation, treatment and community monitoring under the order and direction of the circuit courts for mentally ill and developmentally disabled individuals involved with the criminal justice system. Evaluation and treatment in appropriately secure environments. CPS offers four levels of security (Maximum, Intermediate, Minimum, and Open Campus) at its facilities, with the desired goal of progressive movement through the security continuum based on clinical condition and risk assessment:

- Maximum Security – Fulton State Hospital
- Intermediate Security – Fulton State Hospital
- Minimum Security
 - Northwest Missouri Psychiatric Rehabilitation Center
 - St. Louis Psychiatric Rehabilitation Center
 - Southeast Missouri Mental Health Center
- Open Campus
 - Northwest Missouri Psychiatric Rehabilitation Center
 - St. Louis Psychiatric Rehabilitation Center
 - Southeast Missouri Mental Health Center
 - Fulton State Hospital

Individuals who are released by Circuit Courts from state facilities into community settings are followed by Forensic Case Monitors who assure that these individuals are continuing to fulfill the conditions of their release.

Sexually Violent Predator Program

CPS operates the Sexually Violent Predator program on the grounds of Southeast Missouri Mental Health Center in Farmington. Individuals who have been detained while the courts are determining whether they should be committed to involuntary treatment under the Sexually Violent Predator statutes, as well as individuals who have been committed for treatment under these statutes, are housed in a secure setting. Staff from the Department of Corrections provide perimeter security for this program. CPS staff provide treatment services and supports at the facility.

Access/Crisis Intervention System

CPS contracts with community mental health centers to provide crisis response services through the Access/Crisis Intervention System. Contractors are required to provide a 1-800 number 24-hour crisis hotline, and face-to-face crisis response services in community settings for individuals in acute psychiatric crisis. The crisis hotline and mobile crisis response teams have access to a wide array of services and supports, including acute hospitalization, next-day appointments, respite services, etc., in order to manage psychiatric crises.

Community Psychiatric Rehabilitation Program

The Community Psychiatric Rehabilitation (CPR) Program provides intensive community support, medication management, and psychosocial rehabilitation for individuals with severe, disabling mental illness. This program is funded through Medicaid under the Rehabilitation Option, and is the premier program for supporting seriously mental ill individuals living in community settings.

Comprehensive Outpatient Services

- For Adults
Within the limits of appropriations, CPS contracts for a wide array of community services and supports for adults affected by mental illness, including screening, evaluation, therapy services, medication management, and information and education services. Medicaid funded Targeted Case Management services are also provided. Recently, CPS has developed contracts for a number of consumer-operated services and supports, including drop-in centers, educational programs, and support-lines.
- For Children and Youth
Within the limits of appropriations, CPS contracts for a wide array of community services and supports for seriously emotionally disturbed children and youth, including screening, evaluation, therapy services, medication management, respite services, in-home crisis support services, and information and education services. Medicaid funded Targeted Case Management services are also provided.

Homeless Outreach Services

CPS contracts for outreach services to individuals who are homeless and mentally ill. These services are designed to engage this difficult to reach population, and encourage access to treatment services and supports.

Supported Community Living Services

- For Adults
CPS provides a wide range of housing alternatives for adults affected by serious mental illness. CPS supports individuals living in nursing facilities, residential care facilities, psychiatric group homes, semi-independent apartment programs, and independent apartments. In addition to paying residential or housing cost, CPS provides case management services for these individuals, as well as needed supplemental treatment services and supports.
- For Children and Youth
CPS purchases residential treatment for children and youth with serious emotional disorders, including therapeutic foster care. In addition to paying

residential costs, CPS provides case management services for these individuals, as well as needed supplemental treatment services and supports.

Acute Hospitalization

- For Adults

CPS provides acute psychiatric hospitalization for adults at the following state operated facilities:

- Western Missouri Mental Health Center
- Mid Missouri Mental Health Center
- Metropolitan St. Louis Psychiatric Center
- Southeast Missouri Mental Health Center
- Southwest Missouri Mental Health Center

In addition, CPS purchases acute psychiatric hospitalization through its contracts with community mental health centers.

- For Children and Youth

CPS provides acute psychiatric hospitalization for children and youth at the following state operated facilities:

- Western Missouri Mental Health Center
- Mid Missouri Mental Health Center
- Hawthorn Children's Psychiatric Hospital
- Northwest Missouri Psychiatric Rehabilitation Center

In addition, the CPS purchases acute psychiatric hospitalization through its contracts with community mental health centers.

Long Term and Residential Psychiatric Care

For Adults

CPS provides long-term hospitalization and residential care for adults at the following state operated facilities.

- Northwest Missouri Psychiatric Rehabilitation Center
- Fulton State Hospital
- St. Louis Psychiatric Rehabilitation Center
- Southeast Missouri Mental Health Center
- Southwest Missouri Mental Health Center

For Children and Youth

CPS provides residential care for children and youth at the following state operated facilities.

- Hawthorn Children's Psychiatric Hospital
- Cottonwood Residential Treatment Center

DIVISION OF MENTAL RETARDATION AND DISABILITIES

Habilitation Centers

MRDD operates habilitation centers primarily to serve individuals who are severely disabled, behaviorally disordered, court committed, or medically fragile. The primary mission of the habilitation centers is to provide residential supports and treatment services to people referred by the regional centers. Below is a list of the state operated facilities:

- Bellefontaine Habilitation Center
- Higginsville Habilitation Center and Northwest Community Services
- Marshall Habilitation Center
- Nevada Habilitation Center
- Southeast MO Residential Services
- St. Louis DDTC

Regional Centers

MRDD operates eleven regional centers throughout the state of Missouri. These regional centers are based on eleven principle sites that are supported by numerous satellite locations and represent the primary points of entry into the MRDD system. Regional centers provide assessment and case management services and referral to numerous contract service providers throughout the state. Regional Centers are primarily responsible for service coordination, the development and implementation of a “person centered plan” and the management of state and federal funds that are used to support persons with developmental disabilities and their families. The following is a list of regional centers:

- Albany Regional Center
- Central Missouri Regional Center (Columbia, MO)
- Hannibal Regional Center
- Joplin Regional Center
- Kansas City Regional Center
- Kirksville Regional Center
- Poplar Bluff Regional Center
- Rolla Regional Center
- Sikeston Regional Center
- Springfield Regional Center
- St. Louis Regional Center – North
- St. Louis Regional Center – South

Community Based Services

- Sarah Jian Lopez Medicaid Waiver

The Sarah Jian Lopez Waiver is a Medicaid model waiver operated by MRDD. This waiver allows access to funding for appropriate care and support for children with developmental disabilities so they may continue living at home with their families. Ordinarily, Medicaid eligibility for children is dependent on parental income and resources. The Sarah Jian Lopez Waiver allows parental income and resources to be disregarded for those children who have been determined to be permanently and totally disabled. The purpose of this waiver is to maintain children in their homes and with their families as an alternative to institutionalization. MRDD is able to serve up to 200 children under the age of 18 throughout the state of Missouri.

- Missouri's Consumer and Family Directed Supports

Missouri's Consumer and Family Directed Supports enable families to have choices, make informed decisions, and direct resources to meet their own unique needs. It seeks to help families become more involved in the care and treatment of their family members with disabilities. This initiative targets individuals of all ages from families with young children to families with parents who are aging or in poor health. The program can access both, Medicaid Waiver or general revenue funds (which ever is appropriate). Natural supports, which are supports provided by the people within the community, may be supplemented by services provided by DMH including respite care, personal assistance, adaptive equipment, and home modifications, just to name a few.

Home and Community Based Waiver

The Home and Community Based Waiver is used as the primary source of funding for people who live in the community. MRDD uses general revenue funds to match federal Medicaid dollars to pay for services under the waiver. The waiver includes people who live in group homes, supported living, and with their families. The Medicaid Home and Community Based Waiver for individuals who have mental retardation and/or a developmental disability offer services to certain individuals who are Medicaid eligible and who would otherwise, but for receipt of services through the waiver, require placement in an intermediate care facility for the mentally retarded. Services under the waiver are provided as an alternative to that level of care and the provisions through the waiver must be determined necessary in order to avoid institutionalization.

Family Stipend and Loan Program

The Family Stipend and Loan Program began in 1993 when the General Assembly passed House Bill 330 to assist Missouri's families who have children, under the age of 18, with developmental disabilities living at home. The programs were created to help maintain and enhance families' ability to care for their children at home. The

monthly cash stipend, which can amount to the maximum federal SSI payment for an individual with a disability who lives at home, can be used for goods and services to benefit the child. Low interest loans, with a maximum amount of \$10,000 for a sixty-month period, are also available for families who may not be able to get a loan through traditional means. The loans are typically used for major equipment purchases, home modifications, handicapped accessibility, or similar goods and services.

First Steps

First Steps provides early intervention services to families with young children (ages birth to 3 years) with disabilities. A collaborated effort among the Missouri Departments of Mental Health, Social Services, Health, and Elementary and Secondary Education, the program consists of planning, developing and implementing a network of family focused services.

Choices for Families

Choices for Families provides general revenue funds to help meet the needs of family members with disabilities who live at home. The program works in two ways: Families pay for items and services and then submit receipts for reimbursements to their regional centers, or the families obtain vouchers from the regional centers to obtain items for services from providers who then submit the voucher to the regional centers for payment. In this limited voucher-type program, the families choose their own providers and determine the manner in which the services will be provided to meet their unique needs.

Missouri's Autism Program

Working with DMH, families of persons with autism designed a system in which support services are delivered in homes by providers chosen by an advisory committee comprised of families. The program serves approximately 920 families in 4 regions of the state. In addition, Giant Steps, a highly specialized program, began in St. Louis in the fall of 1994. This program provides individualized holistic and interdisciplinary services for children who have autism.

Quality Framework: Partnership for Customer Focused Systems

The Quality Framework provides a systematic approach to ensuring quality services to persons with developmental disabilities who live in the community. The process for reviewing services will include persons with developmental disabilities, regional centers, and staff in central office. A second phase involves the Missouri Alliance for Individuals with Developmental Disabilities (MOAIDD). This is a statewide volunteer organization of people with developmental disabilities and their families. MOAIDD monitors residential programs every two years throughout Missouri.

OFFICE OF THE DIRECTOR

Mental Health Provider Certification and Licensure

DMH licenses and/or certifies facilities and programs that provide treatment services to consumers with psychiatric, mental retardation/developmental disabilities and substance abuse problems. DMH surveys and verifies compliance with care and treatment standards for approximately 960 providers, (most with multiple sites), per year.

Employee Disqualification Registry

DMH maintains a registry of persons who have had administrative substantiations made against them for abuse or neglect pursuant to department rule. This information can now be accessed by state facilities and mental health service providers to prevent re-employment of such persons in direct care positions. This information will be made available to individual citizens seeking to hire direct care personnel via the Family Care Safety Registry, January 2003.

Consumer Affairs Services

The Director's Office provides a publicized access point for consumer and citizen mental health service complaints. Complaint resolution is assigned and tracked. The Office also provides information and referral service for citizens seeking mental health related information.

Legislative Liaison

The Liaison assists legislators in accessing needed mental health and department related information.

Mental Health Public Awareness Efforts

Public Awareness efforts promote the use of public media to increase the awareness of mental illness, substance abuse and developmental disabilities among Missouri citizens. Focus is on de-stigmatizing these illnesses and disabilities, promoting healthy lifestyles, and accessing needed treatment.

Mental Health Services Information Database and Systems

DMH maintains a comprehensive electronic database and systems to support the complex functions of a state mental health department. DMH is currently committed to a major information system conversion to support its roles as purveyor and biller of services; its purchaser/broker and payor of services; and its service regulator and monitor of services. DMH is also engaging in efforts to assure its (and its service partners) full compliance with the federal Health Insurance Portability Act of 1996 (HIPAA).

Department Operational Supports

Operations include such supports as human resource management, budget preparation/monitoring, contract preparation/management, third party payer billings, internal audit services, outcomes evaluation, regulatory process, abuse/neglect

investigations, administrative hearings/appeals, emergency management response, clinical consultation (medical, nursing, infection control, dietary).

